JOURNAL

OF THE

AMERICAN ORIENTAL SOCIETY.

EDITED BY

E. WASHBURN HOPKINS, AND CHARLES C. TORREY
Professor in Yale University, New Haven.
Professor in Yale University, New Haven.

TWENTY-EIGHTH VOLUME.

SECOND HALF.

THE AMERICAN ORIENTAL SOCIETY,
NEW HAVEN, CONNECTICUT, U. S. A.
MCMVII

A copy of this volume, postage paid, may be obtained anywhere within the limits of the Universal Postal Union, by sending a Postal Order for two dollars and fifty cents, or its equivalent, to The American Oriental Society, New Haven, Connecticut, United States of America.

According to the conversion-tables used in the United States money-order system as the basis of international money-orders, two dollars and fifty cents ($2.50) = 10 shillings and 3 pence = 10 marks and 30 pfennigs = 12 francs or lire and 70 centimes = 9 kroner and 25 öre = 6 florins and 9 cents Netherlandish.

[This half-volume is for July-December, 1907. Issued Feb. 4, 1908, in an edition of 500 copies.]

The Tuttle, Morehouse & Taylor Press.

CONTENTS

OF

TWENTY-EIGHTH VOLUME,

SECOND HALF.

JOURNAL

OF THE

AMERICAN ORIENTAL SOCIETY.

Contributions to Comparative Philippine Grammar, II.[1]—

By FRANK R. BLAKE, Ph.D., Johns Hopkins University, Baltimore, Md.

THE NUMERALS.[2]

THE numerals of the Philippine languages,[3] with the exception of the first, fourth, and sixth of the cardinal series, are derived from dissyllabic roots, and are thus, from a morphological standpoint, more closely allied to nouns than to pronouns. They may be divided into the following classes,[4] viz.:

---

[1] Part I. *Introduction, General Features, Phonology, and Pronouns* appeared in the preceding volume of the Journal, pp. 317-396. For addenda and corrigenda to Part I, see page 252, at the end of this article.

[2] For the principal grammars and dictionaries of the Philippine Languages cf. I, p. 323, ft. nt. 2. For the Kalamian numerals cf. pp. 211-224 of Retana's *Archivo del Bibliofilo Filipino*, II. Add Encina, *Gramatica bisaya-cebuana*, Manila, 1885; Williams, *Grammatische Skizze der Ilocano-Sprache*, München, 1904: Montano (see below, p. 253).

[3] In addition to the languages treated in Part I, viz., Tagalog, Bisayan (Cebuan, Hiliguayna, Samaro-Leytean), Bikol, Pampangan, Pangasinan, Ilokan, Igorot (Nabaloi, Bontok), Ibanag, Batan, Magindanao, Sulu, and Bagobo, the following are also included in this part, viz., Kalamian, Samal, Manobo, Tagakaolo, Bilan, and Atas (cf. Montano, *op. cit.*). The numerals of the Harayan dialect of Bisayan, which was included in Part I, are not given in Mentrida-Aparicio, hence it does not appear in the above enumeration. As the numerals in Montano, *op. cit.*, seem to be very incorrectly reported, they will be given separately in an appendix to the Cardinals, pp. 226-228.

[4] Besides the classes of numerals given here, there are a number of other derivatives, made with verbal particles and used as verbs, but the treatment of these belongs rather to the discussion of the verb.

a) cardinals, answering the question 'how much?'
b) ordinals, answering the question 'in what order in a series?'
c) fractions, answering the question 'what part of?'
d) distributives, answering the questions 'how many at a time?' 'how many apiece?'
e) adverbs, answering the questions 'how often?' 'which time?'
f) restrictives, in which the idea of 'only' is added to the other numerals.

Cardinals.

For purposes of discussion the cardinals may be conveniently divided into the following classes, viz.:

Primary.

a) units from 'one' to 'ten.'
b) even tens from 'twenty' to 'ninety.'
c) even hundreds, thousands, etc.

Intermediate.

a) teens from 'eleven' to 'nineteen.'
b) numbers between even tens.
c) numbers between even hundreds, thousands, etc.

Primary Cardinals.

The units have the following forms in the various languages, viz.:

	1	2	3	4	5
Tag.[1]	isa	dalawa	tatlo	apat[2]	lima

[1] Noceda in his Tagalog dictionary, article *isain*, p. 159, mentions another series of the first ten numerals, viz., *isain*, *duwain*, *mampat*, *agyo*, *tondong*, *kala*, *manapit*, *saga*, *bulaid*, *toro*, which, he states, were used in ancient times. The first series, however, is the common property of all the languages of the Malayo-Polynesian family, so it is hardly possible that the second series should be the more ancient. Brandstetter, *Tagalen and Madagassen*, Luzern, 1902, p. 10, thinks that Noceda's statement rests on a misunderstanding, and that they represent a series of secret numbers or the numerals of another language: the former supposition is probably correct. It may be that some of them belong to one of the idioms of the Negritos, about which very little is known. The first two numerals of this series, *isain*, *duwain*, seem to be derivatives with the suffix *in* from *isa* of the other series, and **duwa* an older form of 'two' (cf. below, p. 204); the third, *mampat*, is based on *pat*, the root of *apat*, the fourth of the first series.

[2] The form *ipat* occurs in the adverbs, cf. below, p. 246.

	1	2	3	4	5
Bis. (Ceb.)	usa	duha, duduha[1]	tolo, totolo[1]	upat	lima, lilima[1]
Bis. (Hil.)	usa, isa	duha, daroa	tolo, tatlo	opat, apat	lima
Bis. (S.L.)	usa	duha, duduha[1]	tolo, totolo[1]	upat	lima
Bik.	saro	dua	tolo	apat	lima
Pamp.	isa, metong	adua	atlo	apat	lima
Pang.	isa, sakey	dua[2]	talo[3]	apat[4]	lima
Ilok.	isa, maisa	dua	tallo[3]	uppat	lima
Iban.	itte, tadday	due, dua	tallu	appat	lima
Igor. (Nab.)	saxei	chua	taddo	appat	dima
Igor. (Bon.)	isa	chuwa	tolo	ipat	lima
Bat.	asa[5]$_{13}$	dadua$_{6}$	tatdo$_{13}$	apat$_{xlvii}$	dima$_{xlvii}$ dadima$_{6}$
Kal.	tata, eta	doroa	tolo	epat	lima
Mag.	isa	dua	telu	apat, pat[6]	lima

[1] In Cebuan these reduplicated forms are made from the units with initial consonant; in Samaro-Leytean the same rule probably applies, although it is not stated and only 'two' and 'three' are given. In Samaro-Leytean these forms are used when the numerals form the predicate of a sentence, and are equivalent to verbal forms with prefixed *ma*, e. g., *maduha*. Zueco gives the following ambiguous distinction between reduplicated and unreduplicated forms: "Las unidades cuya inicial es consonante, duplican la primera silaba cuando especifican una cantidad. No la duplican, cuando la cuenta es abstracta." He also states, however, that the two forms may be used without distinction (cf. Zueco, p. 14).

[2] The numerals from 'two' to 'ten' are followed by *ra*, *ira* 'they' when they stand as predicate of a sentence, *ra* after a vowel, e. g., *dua ra*, *ira* after a consonant, e. g., *apat ira*.

[3] In the distributives *tatlo* also occurs (cf. below, p. 239).

[4] The form *epat* occurs in the distributives (cf. below, p. 239).

[5] With Batan forms the subscript Arabic numerals refer to the pages of the Batan Catechism, and the Roman numerals to the pages of the "Prologo" in Retana's *Archivo*, vol. II, on which the forms occur.

[6] Given by Porter, *A Primer and Vocabulary of the Moro Dialect* (*Magindanau*), Washington, 1903, p. 71.

	1	2	3	4	5
Sulu	isa, hambuk	dua	to	opat	lima
Bag.	sabbad	dua	tatlo	appat	lima

	6	7	8	9	10
Tag.	anim	pito	walo	siyam	sangpowo, polo[1]
Bis. (Ceb.)	unum	pito, pipito	walo	siam, sisiam	(na)polo
Bis. (Hil.)	unum, anum	pito	walo	siam	(na)polo, isa ka-polo[2]
Bis. (S. L.)	unom	pito	walo	siam	napolo
Bik.	anom	pito	walo	siam	sangpolo[3]
Pamp.	anam	pitu	walo	siam	apulo
Pang.	anem	pito	walo	siam	sampolo
Ilok.	innem, ennem	pito	walo	siam	polo, sanğa-polo,-pollo
Iban.	annam	pitu	walu	siam	mafulu
Igor. (Nab.)	annim	pitto	gualo	dsiam	sampulo
Igor. (Bon.)	inim	pito	walo	siam	simpoo
Bat.	anem[4]	pito,[4] papitu,	wago[4]	siam[4]	$pogo_{xlv}$, $asa\text{-}pogo_{s}$, asa a $pogo_{6}$
Kal.	eñem[5]	pito	walo	siam	tampolok
Mag.	anem, nem[6]	pitu	walu	siau	sapulu
Sulu	ünom	peto	walu	siam	hangpoh
Bag.	annam	pitto	walo	sio	sapolo

[1] *Polo* is said to be used without *sang* when counting consecutively, cf. Totanes, *Arte de la lengua tagala*, Binondo, 1865, p. 103. This form is either dialectic or is borrowed from one of the adjacent languages.

[2] *Sampolo* is found also in the distributives (cf. below, p. 240).

[3] Following *sangpolo* in San Augustin is *de rarong polo*. Whether this indicates that *polo* is rarely used alone, or that there is another form *saro-ng polo*, as in the case of *laksa*, 'million,' is uncertain.

[4] Assumed on the basis of the ordinals on pp. 5 and 6 of the Catechism.

[5] So given in the Kalamian vocabulary (cf. above, p. 199, ft. nt. 2) p. 224; doubtless simply a mistake for *enem*.

[6] Given by Porter *op. cit.*, loc. cit., as *nūm*, *ū* being probably used to represent the indistinct vowel which is given as *e* by Juanmarti.

The forms of 'one' differ from those of the other numerals in being derived from pronominal particles. They have for the most part been explained in Part I, pp. 344, 345. Add the following. Batan *asa* is probably the root particle *sa* which is found in the majority of the forms of 'one,' with a prefixed *a* probably identical with the *a* of Tagalog *ang*, just as the *i* of *isa* is identical with the *i* of Pampangan *ing*. Kalamian *tata*, *eta* are based on a root particle *ta* identical with the *sa* (cf. *kutawa* 'husband, wife' = *ka*+*atawa* [Tag. *asawa*] and cf. also the change from *s* to *t* in Ibanag [I, p. 333]). *Tata* is a reduplicated form, *eta* is probably identical with *i-sa*. Pampangan *metong* is probably to be analyzed as *me* (=Ilok. *mai* in *maisa* [I, p. 331])+*to* (=dem. root part. *to* [I, p. 352])+ligature *ng*, which has become an integral part of the word as in Tagalog *ang* (I, p. 341 f.). If *metong* contains the demonstrative root particle *to*, it is not unlikely that the root particle *sa*, which is found in the majority of the forms of 'one,' is identical with the demonstrative particle *sa* of the Pangasinan definite article *sa* (I, p. 342).

Sulu *hambuk* is probably *hang-buk* with assimilation; for *hang* cf. below, p. 207; *buk* is probably numeral coefficient (cf. I, p. 345).

The remaining nine numerals are apparently derived from roots, dissyllabic except in the case of 'four' and 'six.' The fifth numeral is also the word for 'hand' in many of the languages. Here it is evident that the word for 'hand' with its five fingers has been taken to indicate 'five.' The original meaning of the other numeral roots does not appear.

The original Philippine form of 'two' seems to have been *dua* (*doa*) as in Bikol, Pangasinan, Ilokan, Ibanag, Magindanao, Sulu, and Bagobo. Ibanag *due*, like *itte*, contains the ligature *i*, viz. *dua*+*i* (cf. I, p. 345). Igorot *ch* is the regular phonetic representation of *d* (I, p. 333). In Bontok *chuwa*, a semi-vowel *w* has been developed out of *u*. In Bisayan *duha* a secondary *h* has been developed between the two vowels. In Pampangan the initial *a* of *adua* is, like that of *atlo*, 'three,' probably derived from the *a* of *apat* 'four;' 'two' and 'three' had probably become monosyllabic as **dwa* and **tlo*, and the *a* was prefixed in order to conform them to the prevailing dissyllabic type. The fact that 'six' is *anam* and 'ten' *apulo* may also have had some influence in bringing about this ana-

logical change.[1] Kalamian *doroa* and Cebuan and Samaro-Leytean *duduha* have reduplication[2] of the first syllable. In Hiliguayna *daroa* and Batan *dadua* the vowel of the reduplication is written *a* instead of *u*, *o*, and probably represents an unaccented indistinct vowel. Tagalog *dalawa* is difficult ; it may represent a reduplicated form of **dawa*, intervocalic *d* being irregularly changed to *l* instead of *r*, or it may be **dawa* with infixed particle *la*.[3] **Dawá* is probably a modification of *diwá*, derived by insertion of *w* from **dua*,[4] unaccented *u* being changed to *a* as in the reduplicated forms above.

The original form of 'three' seems to have been a form *t-lo* with an indistinct vowel between the two consonants. This indistinct vowel appears as *o* in Bisayan, Bikol, Bontok, and Kalamian *tolo*, and Cebuan and Samaro-Leytean reduplicated *totolo*, as *a* in Pangasinan *talo*, Ilokan, Ibanag, *tallo*, *tallu*, Nabaloi *taddo*, and as *e* in Magindanao *telu*. In Nabaloi *l* appears as *d*

---

[1] For analogical changes produced by the influence of consecutive numerals upon each other, cf. Osthoff u. Brugmann, *Morphologische Untersuchungen*, Leipzig, 1878, Th. 1, pp. 92–132; also my article, *Hebrew* חֲמִשָּׁה, חֲמִשִּׁים, JAOS., vol. xxvi, 1905, pp. 117–119.

[2] In the Philippine Languages reduplication at the beginning of a word, which is the only kind we are concerned with in this article, consists in the repetition of either one or two syllables. Ordinarily the final consonant of the syllable or combination of syllables which is to be reduplicated, does not appear in the reduplication, except when it is the final consonant of a word or root. Reduplication of one syllable may be called partial, reduplication of two syllables, full reduplication. The two are sometimes combined in the same word. Examples in Tagalog are, e. g.,

susulat *from* sulat
magiginbanal *from* maginbanal
araw-araw " araw
babalibaligtad " baligtad
kakatakatawo " katawo

Sometimes, however, in partial reduplication the consonant after the vowel of the syllable to be reduplicated is repeated, even though it stands in the following syllable. This mode of reduplication is found chiefly in the languages of the Northern Group like Ilokan. Examples in Ilokan are, e. g.,

balbalay *from* balay
silsilid " silid.

[3] Cf. L. B. Wolfenson, *The infixes la, li, lo, in Tagalog*, JAOS., vol. xxvii, 1906, pp 142–146.

[4] Cf. the ordinal form *ikalua*, p. 230, below.

(I, p. 334). The doubling in Ilokan, Ibanag, and Nabaloi is phonetic (I, p. 336). Sulu *to* represents a contraction of *too* derived from *tolo* by loss of intervocalic *l* (I, p. 333 f.). In Pampangan *atlo* the initial *a* is to be explained like the *a* of *adua*; the indistinct vowel is syncopated. Tagalog, Hiliguayna, Bagobo *tatlo*, Batan *tatdo* (*d* for *l*, cf. I, p. 334) consist of the syncopated form *tlo* with a reduplicative syllable *ta*, *a* representing an indistinct, unaccented vowel.

The original form of 'four' seems to have been *pat*. This has been made dissyllabic by prefixing an articular particle *a* in Tagalog, Hiliguayna, Bikol, Pangasinan, Batan, and Magindanao; *u*, *o* in Bisayan, Ilokan, and Sulu; *i*, *e* in Bontok and Kalamian. The doubling in Ibanag, Nabaloi, and Bagobo *appat*, Ilokan *uppat*, is phonetic. Magindanao *pat* may be the original root, or it may be a shortened form due perhaps to the analogy of forms like *sapulupat* 'fourteen,' if the *a* is lost here phonetically (cf. below, p. 217).

The original form of 'five' was *lima*, as in all the languages except Nabaloi and Batan where *l* has been changed to *d*. Cebuan has the reduplicated form *lilima*, and Batan the form *dadima*, in which the vowel of the reduplication is *a*.

The original form of 'six' was probably *n-m* with an indistinct vowel between the two consonants. This form, like *pat* 'four,' was made dissyllabic by prefixing an articular particle, *a* in Tagalog, Hiliguayna, Bikol, Pampangan, Pangasinan, Ibanag, Nabaloi, Batan, Magindanao, and Bagobo; *u*, *o* in Bisayan, and Sulu (for *ü* cf. I, p. 332); *i*, *e* in Ilokan, Bontok, and Kalamian. In every case except in Ilokan the articular particle is the same as that used in 'four.' The indistinct vowel appears as *i* in Tagalog *anim*, Nabaloi *annim*, Bontok *inim*, as *e* in Ilokan *innem*, Pangasinan, Batan, Magindanao *anem*, Kalamian *eñem*, as *u*, *o* in Bisayan *unom*, *unum*, Hiliguayna and Bikol *anom*, *anum*, Sulu *ünom*, as *a* in Pampangan *anam*, Ibanag and Bagobo *annam*. The doubling in Ilokan, Ibanag, Nabaloi, and Bagobo is phonetic. Magindanao *nem* (*num*) is to be explained like *pat* 'four.'

The original form of 'seven' was *pito*, *pitu*, as in most of the languages. Phonetic doubling occurs in Nabaloi and Bagobo *pitto*. In Sulu *peto*, *i* is represented by *ē* (cf. I, p. 377). Reduplicated forms are Cebuan *pipito* and Batan *papitu*, in the latter of which the vowel of reduplication is *a*.

The original form of 'eight' was *walo*, *walu*, as in most of the languages. In Nabaloi *gualo*, initial *w* has become *gu* (I, p. 332), and in Batan *wago*, intervocalic *l* has become *g* (I, p. 334).

The original form of 'nine' was *siam*, as in most of the languages. Cebuan has the reduplicated form *sisiam*. In Tagalog *siyam* a semi-vowel *y* has been developed out of the *i*. In Nabaloi *dsiam* the initial *s* has suffered some phonetic modification; *ds* probably represents the affricative *dz*. In Magindanao *siau* and Bagobo *sio* the end of the word has been modified after the analogy of the adjacent numerals, in Magindanao *walu*, *sapulu*, in Bagobo *walo*, *sapolo*; *sio* may be a contraction of **siau*.

'Ten' consists sometimes of the simple root, but usually of a combination of root and prefix. The original root of 'ten' was *polo*, *pulu*, *pulo*. This is found unchanged in Bisayan, Bikol, Pampangan, Pangasinan, Ilokan, Nabaloi, Magindanao, and Bagobo. Kalamian *polok* has added a final *k* of uncertain origin. Ilokan may have doubling of the *l*, viz. *pollo*. In Ibanag *fulu*, *p* before *u* has become *f* (I, p. 332). In Batan *pogo* intervocalic *l* has become *g*. In Tagalog *powo*, Bontok *poo*, and Sulu *poh* intervocalic *l* has been elided (cf. I, p.333 f.). In Tagalog a secondary *w* has been developed out of the *o* vowels; the *h* in Sulu may be simply graphic. Root forms seem to be used only in Tagalog, Bisayan, Ilokan, Batan, and perhaps in Bikol (cf. p. 202, ft. nt. 3), and then probably only when counting consecutively.[1] Usually the root has a prefix meaning 'one, a.' This prefix is *sa*, the root particle of 'one,' without ligature in Magindanao and Bagobo *sapulu*, *sapolo*; *sa* followed by ligature in Tagalog and Bikol *sa-ng-polo*, Pangasinan and Nabaloi *sa-m-polo*,[2] *sa-m-pulo*, Ilokan *sa-ñga-polo*, Kalamian *ta-m-polo-k*. Bontok *simpoo* may possibly be modified from *sa-m-poo* after the analogy of *siam* 'nine,' but as *sin*

[1] This is true at least of Tagalog (cf above, p. 202, ft. nt. 1). It is possible that the root form is also used in this way in Pampangan, cf. the statement "nota que isa 1. y *apolo* 10 sólo se dicen numerando simplement, mas para individuarse usa de *metong*, uno, y *Apolo*, diez." Here the first *apolo* is probably a mistake for *polo*, otherwise this statement is without meaning with regard to 'ten.'

[2] The ligature *n* or *ng* is often assimilated to *m* before a labial.

occurs as prefix also in the other powers of ten it is more likely that it is based on the pronominal particle *si*. In Hiliguayna *isa-ka-polo* and Batan *asa pogo*, *asa a pogo*, and perhaps in Bikol (cf. p. 202, ft. nt. 3), the full numeral 'one' is prefixed to the root; in Hiliguayna the root takes the prefix *ka* according to rule;[1] in Batan the ligature *a* may be used or not. *Hang* in Sulu *hangpoh* is probably to be analyzed as *a-ng* morphologically identical with Tagalog article *ang*, but having an indefinite meaning 'one, a,'[2] with a secondary initial *h* (I, p. 336). Pampangan *apulo* probably contains the same particle *a* without ligature. Bisayan has the prefix *na*, Ibanag the prefix *ma*, viz., *na-polo*, *ma-fulu*, which are probably connected in some way with the identical verbal prefixes.

The even tens have the following forms in the various languages, viz.:

	20	30	40	50
Tag.	dalawa-ng powo	tatlo-ng powo	apat na powo	lima-ng powo
Bis. (Ceb.)	kuluhaan	katloan	kaupatan	kalim-an
Bis. (Hil).	kaluhaan, duha ka-polo	katloan, tolo ka-polo, tatlo ka-polo	kap-atan, apat ka-polo	kalim-an, lima ka-polo
Bis. (S. L.)	karuhaan	katloan	kapatan	kalim-an
Bik.	dua-ng polo	tolo-ng polo	apat na polo	lima-ng polo[3]
Pamp.	adua-ng polo	atlo-ng polo[3]	apat a polo	lima-ng polo[3]
Pang.	dua-n polo	talo-n polo	apat a polo	lima-n polo
Ilok.[4]	dua pol(l)o	tallo pol(l)o	uppat a pol(l)o	lima pol(l)o
Iban.	dua fulu	tallu fulu	appat a fulu	lima fulu
Igor. (Nab.)	chua pulo	taddo pulo	appat pulo	dima pulo
Igor. (Bon.)	chuwa-n poo	tolo-n poo	ipat poo	lima-n poo

[1] Cf. my paper *Differences between Tagalog and Bisayan*, JAOS., vol. xxv, 1904, p. 167.

[2] So in Arabic and Mineo-Sabean, the nunnation and mimmation respectively, though originally emphatic and definite, have acquired an indefinite meaning, e. g., Arabic بيت *baitu*ⁿ, Mineo-Sabean بيتم *bit-m* 'a house'; cf. Wright-De Goeje, *A Grammar of the Arabic Language*, Cambridge, 1896, vol. I, §§ 8, 308; Hommel, *Südarabische Chrestomathie*, München, 1893, p. 36, § 57.

[3] Not given, but practically certain.

[4] For another series of 'tens' cf. the intermediate numbers, p. 222 below.

	20	30	40	50
Bat.	?[1]	?	?	dima a pogo$_{xliv}$
Kal.	doroa-ng polok	tolo-ng polok	?	?
Mag.	dua pulu	telu pulu	apat pulu	lima pulu
Sulu	kauhan	katluan	kaopatan	kaiman
Bag.	dua polo	tatlo polo	appat polo	lima polo

	60	70	80	90
Tag.	anim na powo	pito-ng powo	walo-ng powo	siyam na powo
Bis. (Ceb.)	kanuman	kapitoan	kawaloan	kasiaman
Bis. (Hil.)	kan-uman, anum ka-polo	kapitoan, pito ka-polo	kawaloan, walo ka-polo	kasiaman, siam ka-polo
Bis. (S.L.)	kaun-man	kapitoan	kawaloan	kasiaman
Bik.	anom na polo[2]	pito-ng polo[2]	walo-ng polo[2]	siam na polo
Pamp.	anam a polo[2]	pito-ng polo[2]	walo-ng polo[2]	siam a polo
Pang.	anem a polo	pito-n polo	walo-n polo	siam a polo
Ilok.	innem / ennem a pol(l)o	pito pol(l)o	walo pol(l)o	siam a pol(l)o
Iban.	annamma fulu	pitu fulu	walu fulu	siamma fulu
Igor. (Nab.)	annim pulo	pitto pulo	gualo pulo	dsiam pulo
Igor. (Bon.)	inim poo	pito-n poo	walo-n poo	siam ay poo
Sulu	kaünoman	kapetoan	kawaluan	kasiaman
Bag.	annam polo	pitto polo	walo polo	sio polo

These tens are made in one of two ways, viz., *a*) by multiplication, that is by placing the unit before the root of 'ten,' the ligature being sometimes used to join the two, sometimes not; *b*) by deriving abstracts from the units by prefixing *ka* and suffixing *an*.

The first formation is found in all the languages except Cebuan, Samaro-Leytean, and Sulu, the second in Bisayan in general and Sulu. Both formations occur in Hiliguayna. In the first formation the ligature is regularly used in Tagalog, Bikol, Pampangan, Pangasinan, and Kalamian (?). It is regularly omitted in Nabaloi, Magindanao, and Bagobo. In Ilokan

[1] A question mark indicates that the form is not given in the work or works referred to If a language is omitted entirely it indicates the same thing.

[2] Not given, but practically certain.

and Ibanag the ligature is used only after units ending in a consonant; in Ibanag the final *m* of *anam* and *siam* is doubled before the ligature *a*. In Bontok it is found after all units ending in a vowel,[1] but is apparently optional after one ending in a consonant. In Batan, to judge from the forms of 'ten' *asa pogo* and *asa a pogo*, the ligature seems to be optional, at least after a vowel. In Hiliguayna no ligature is used, but 'ten' takes the prefix *ka* according to rule.

In the second formation, the following are made regularly from the units, 'seventy,' 'eighty,' and 'ninety' in all the languages; 'forty' in Cebuan and Sulu; and 'sixty' in Sulu. In 'twenty,' Samaro-Leytean *ka-ruha-an* is derived from **ka-duha-an* by change of intervocalic *d* to *r* (I, p. 334). In Cebuan and Hiliguayna a similar form **ka-ruha-an* has been still further modified to *ka-luha-an* by change of *r* to *l* (I, pp. 333, 382 f.). In Sulu the development is probably as follows: an original **ka-dua-an* > **ka-duan* with contraction, > **ka-duhan* with development of secondary *h* as in Bisayan *duha*, > **ka-ruhan* with change of intervocalic *d* to *r*, > *ka-luhan* with change of *r* to *l*, > *ka-uhan* with loss of intervocalic *l* (I, p. 333 f.). 'Thirty' is regularly made on the syncopated basis *tlo*, *tlu*. 'Forty' in Hiliguayna and Samaro-Leytean is made either from the root *pat* or from a base *apat*, which however does not occur in Samaro-Leytean, the initial vowel *a* coalescing with the *a* of the prefix. Hiliguayna has developed a glottal catch after the *p*, viz., *kap-atan*. 'Fifty' in Bisayan syncopates the final *a* of the unit and develops a glottal catch before the suffix, viz., *kalim-an*. In Sulu final *a* of the unit is contracted with the *a* of the suffix and the intervocalic *l* is elided. 'Sixty' in Cebuan and Hiliguayna is made either from the root *num* or from a base *anum*, which however does not occur in Cebuan, the initial *a* coalescing with the prefix as in 'forty,' developing a glottal catch in Hiliguayna *kan-uman*. Samaro-Leytean *kaunman* may represent a metathesis of *kanuman* or it may be made from *unum*, with syncope of the second *u*.

The powers of 'ten' have the following forms in the various languages, viz.:

[1] Forms like *chuwa lifo* 'two thousand' and *tolo lifo* 'three thousand' in the compound numerals indicate the possibility of the omission of the ligature after a vowel.

	100	1,000	10,000	100,000	1,000,000
Tag.	sangdaan, isa-ng daan	sanglibo, isa-ng libo	sanglaksa, isa-ng laksa	sangyota, isa-ng yota	sangpowo-ng yota sanggatos sangangawangaw
Bis. (Ceb.)	usa ka-gatos	usa ka-libo	napolo ka-libo	usa ka-gatos ka-libo	napolo ka-gatus ka-libo
Bis. (Hil.)	usa / isa } ka-gatos	usa / isa } ka-libo	usa / isa } ka-laksa	napolo ka-laksa, usa / isa } ka-gatos ka-libo	usa / isa } ka-lamak / ka-gatos ka-laksa
Bis. (S. L.)	usa ka-gatos	usa ka-yokot	?	?	usa ka-ribo
Bik.	sanggatos	sangribo	?	?	sanglaksa / saro-ng laksa
Pamp.	dinalan	libo	laksa	gatus	sangyota
Pang.	sanlasus	sanlibo[1]	sanlaksa	sampolo-n laksa	sanlasus laksa, libo-y libo
Ilok.	sangagasut	sangaribu	sangalaksa	sangapollo a laksa	sangariuriu
Iban.	magatut	maribu	?[2]	magatut jibu	mafulu gatut jibu, mariburibu
Igor. (Nab.)	sandasus	sandibo	?	?	?
Igor. (Bon.)	sinlasot, lasot	sinlifo	sinpoo-y lifo	?	?
Kal.	agket[3]	?	?	?	?
Mag.	magatus	sangibu	salaksa	sajuta	sakati
Sulu	anggatus, angratus	angibu	salaksa	hangpoh laksa	angratus laksa
Bag.	sabbad gatos	sabbad mararan	sabbad maribo	sabbad gatos mararan	sabbad gatos maribo

[1] The most common spelling of this word is *livo*. This may represent a phonetic change of *bu* or *bo* to *vu* or *vo* as in Ibanag (I, p. 332), or it may be simply due to the confusion of *b* and *v* in Spanish.

[2] Probably *mafulu ribu*.

[3] *Archivo*, vol. ii, p. 222.

Still higher numerals are given in some of the languages,[1] viz.:

	10,000,000	100,000,000
Tag.	sangkati	
Pang.	sanlibo-n laksa	nilaksalaksa
Mag.	sakedi	sapandang

These numerals have regularly, except in the case of Pampangan and Kalamian (?), a prefix similar to that used with 'ten.'

The forms of 'one hundred,' omitting Kalamian *agket*, which stands alone, are based on two roots. One is *dalan*, which occurs in Tagalog as *daan* with loss of intervocalic *l*, in Pampangan as *d-in-alan* with infix *in*, probably connected with the nominal infix *in* which means 'like, similar'; *dalan* also means road in many of the languages, and there may be some connection between the two. The other appears in various forms, viz.: as *gatus*, *gatos* in Bisayan, Bikol, Magindanao, Sulu, and Bagobo, as *ratus* in Sulu, as *gasut* in Ilokan, *gatut* in Ibanag, as *lasus* in Pangasinan, *lasot* in Bontok, and *dasus* in Nabaloi. The original form seems to have been *ratus*, as in Malay and Javanese.[2] This would explain the initial *l* of the Pangasinan and Bontok forms, and the *d* of the Nabaloi form (cf. I, pp. 333, 334). The initial *g* of the other forms may represent an irregular change of *r* similar to that in Ibanag, Pangasinan, and Nabaloi *piya* (Sam.-Ley. *pira*), cf. I, pp. 334, 335. Sulu *ratus* may be simply borrowed from Malay. In Ibanag final *s* has become *t* and then glottal catch (I, pp. 333, 336). In Ilokan and Bontok there is a metathesis of the *s* and *t*. The Pangasinan and Nabaloi forms *lasus*, *dasus* are probably a blend of two forms, one **latus*, **datus*, the regular phonetic representative of original **ratus*, the other **lasut*, **dasut*, with metathesis of *s* and *t*, as in Ilokan and Bontok.

The forms of 'thousand' are for the most part based on a root *ribu* identical with Malay *ribu*. This root occurs as *ribu*, *ribo* in Bikol, Ilokan, and Ibanag; with change of *r* to *l* as *libo* in Tagalog, Bisayan (except Samaro-Leytean), Pampangan,

[1] In Pampangan *katakata* means a number beyond count. The root *kata* is probably the same as *kati* in Magindanao and Tagalog.

[2] Cf. Marre, *Des Noms de Nombres en usage dans Madagascar, aux Philippines, dans la Malaisie et dans la Polynésie*, Torino, 1899, p. 13.

Pangasinan, as *lifo* with change of *b* to *f* in Bontok (I, p. 332); with change of *r* to *d* as *dibo* in Nabaloi. Magindanao *sanĝibu*, Sulu *angibu* are probably derived by assimilation respectively from **sangribu* and **anglibu*. In Magindanao, however, *nĝibu* is treated as root, e. g., *dua nĝibu* 'two thousand.' In Bagobo the root is *-raran*, doubtless identical with *dalan* 'hundred,' both intervocalic *d* and *l* being changed to *r*. In Samaro-Leytean the root is *yokot*, which has no analogon.

The forms of 'ten thousand' are made for the most part from *laksa*, a loan work from Sanskrit (=*lakṣá* 'hundred thousand') though Bagobo employs *ribo*, and Cebuan and Bontok expresses it by multiplication of 'thousand' as in English.

'Hundred thousand' is expressed variously; in Tagalog and Magindanao by a root *yuta*, *yota*, a loan word from Sanskrit (=*ayúta* 'ten thousand'); in Pampangan by *gatus*, ordinarily employed for 'one hundred.' It is expressed by multiplication as 'ten ten-thousands,' in Cebuan, Hiliguayna, Pangasinan, Ilokan, and Sulu, and as 'a hundred thousands' in Hiliguayna, Ibanag, and Bagobo. In Ibanag, *ribu* has become *jibu* (pronounced *žibu*) after *magatut* (pronounced *magatu'* with glottal catch); as *d* regularly becomes *j* before *i*, *jibu* probably represents a form **dibu* which may have been derived from *ribu* by partial assimilation of the *r* to the preceding *t* of *magatut*, before that *t* was changed to the glottal catch.

'One million' is expressed by the following roots, viz.: in Tagalog by *gatos* (usually employed for 'one hundred') or *anĝawanĝaw;* in Hiliguayna by *lamak;* in Samaro-Leytean by *ribu* (usually employed for 'thousand'); in Ibanag by *riburibu* with reduplication; in Bikol by *laksa* (usually employed for 'ten thousand'); in Pampangan by *yota* (also employed for 'hundred thousand'), in Ilokan by *riuriu*, in Magindanao by *kati*, probably a loan word from Sanskrit (= *kóṭi* 'ten million'). It is expressed by multiplication, as 'ten hundred-thousands' in Tagalog, Cebuan, and Ibanag; as 'a hundred ten-thousands' in Hiliguayna, Pangasinan, Sulu, and Bagobo; and as 'a thousand thousands' in Pangasinan, and perhaps in Ibanog. In Tagalog *anĝawanĝaw*, Ilokan *riuriu*, and perhaps in Ibanag *riburibu*, the reduplication emphasizes the greatness of the number.[1]

[1] Cf. also Pampangan *katakata* 'a number beyond count.'

'Ten million' is expressed in Pangasinan as 'a thousand ten-thousands,' in Tagalog by *kati* (= Mag. *kati*), and in Magindanao by the root *kedi*, perhaps a modification of *kati* (cf. Malay and Javanese *sa-keti* 'hundred thousand').

'One hundred million' is expressed in Pangasinan by 'ten-thousand ten-thousands,' the compound taking a prefix *ni*, in Magindanao by the root *pandang*. This prefix *ni* may be the Pangasinan prefix *ni*, which is used instead of the infix-prefix *in* of similarity before *l* and *y*, and is thus the same as the *in* of Pampangan *dinalan*, or it may be the Sanskrit prefix *ni* which is used in that language with certain higher numerals, viz.:

niyuta	'100,000.'
nyarbuda	'100,000,000.'
nikharva	'100,000,000,000.'[1]

The prefixes employed with these roots are in general the same as those employed with 'ten'; so throughout in Ilokan, Ibanag, and Igorot. Tagalog has in addition to the *sang* which is used with 'ten' a fuller form *isa-ng*, i. e., numeral 'one' + ligature. Bisayan has the numeral 'one' followed by the root with prefixed *ka* (a formation found also in 'teń' in Hiliguayna) except in 'ten thousand' in Hiliguayna, which may be expressed as 'ten ten-thousands' as well as by 'one hundred thousand.' Bikol has in 'million' in addition to *sang*, *saro-ng*, i. e., 'one' + ligature. Pangasinan has *san* or *sam* identical with the prefix of 'ten' except in 'ten million,' where a prefix *ni* is used. In Magindanao all numerals take *sa* like 'ten' except 'one hundred,' which has *ma* like Ibanag. Sulu has *ang*, probably a more original form of the *hang* of 'ten,' except in 'ten thousand,' which has *sa* like Magindanao, and 'one hundred thousand,' which is expressed by 'ten ten-thousands.' Bagobo has *sabbad* 'one' before the root of 'hundred,' and before the root with additional prefix *ma* in the higher numerals. Pampangan has the infix *in* in 'one hundred,' and the prefix *sang*, identical with Tagalog and Bikol *sang*, in 'one million.' In Tagalog, Bisayan, Bikol and Bagobo, as has been seen, the full form of the numeral 'one' may be used as prefix. Forms without prefix (or infix) are Pampangan *libo*,

[1] Cf. Whitney, *A Sanskrit Grammar*, 3d ed., Leipzig and Boston, 1896, pp. 177, 178.

laksa, *gatus*, Pangasinan *libo'y libo*, Bontok *lasot*, and Kalamian *agket*(?).

Generally speaking, even multiples of these numerals are formed by multiplication, the units being placed before the numeral, which regularly loses its prefix; the ligature is used as in the formation of the tens. The prefix is retained in Pampangan *sangyota* 'million,' and in Sulu in the forms with *ang*. In Pampangan the infix *in* of *dinalan* is dropped, e. g.:

	200	
Tag.	dalawa-ng daan	
Bis.	duha ka-gatos	
Bik.	dua-ng gatos[1]	
Pamp.	adua-ng dalan	apat a sangyota '4,000,000'
Pang.	dua-n lasus	
Ilok.	dua gasut	
Iban.	dua gatut	
Igor. (Nab).	chua dasus	
Igor. (Bon.)	chuwa-n lasot	
Mag.	dua gatus	dua ngĩbu '2,000'
Sulu	dua ang-ratus	dua laksa '20,000'
Bag.[2]	dua gatos	

Ilokan also has forms made on the basis of the hundred, thousand, etc., toward which the count is proceeding, by means of the prefix *kanika*, e. g., *kanikatlo gasut* 'two hundred,' cf. below, p. 222.

In those numerals which consist of a compound numeral with a prefix the same rules in general apply, e. g.,

Iban. dua gatut jibu '200,000.'[3]

---

[1] walo-ng gatos '800' is the only 'hundred' given, but the others are practically certain.

[2] The derivatives of the higher numerals, which are not given, are probably e. g.,

dua mararan '2,000.'
dua maribo '20,000.'

with retention of the prefix *ma*, cf. '100,000' and '1,000,000.'

[3] So in all probability, though the forms are not given,

Tag. dalawa-ng powo-ng yota '2,000,000.'
Hil. dua ka-gatos ka-libo '200,000.'
dua ka-gatos ka-laksa '2,000,000.'

The Cebuan compound numerals beginning with *napolo* 'ten' substitute the other tens for *napolo*,[1] e. g.,

kaluhaan ka-libo '20,000.'
katloan ka-libo '30,000.'

The forms without prefixes take the units before them just as in the case of 'ten.'[2]

A number of these higher numerals are derived from Sanskrit, so *laksa*, *yuta*, and probably *kati* (*kata*,[3] *keti*?). The prefix *ni* of Pangasinan *nilaksalaksa* is perhaps also borrowed from Sanskrit.[4] The idea that *ribu* 'thousand' is of Semitic origin, cf. Hebrew רִבּוֹ 'ten thousand,' is clearly untenable. It does not occur in Arabic, which is the only Semitic language with which these languages have come in contact.

As is often the case with the higher numerals in many languages, these numerals are frequently confused in the Philippine languages. The root *dalan* is used for 'one hundred' in Tagalog and Pampangan, but for 'one thousand' in Bagobo. *Ratos* is used for 'one hundred' in most of the languages, but in Pampangan it is used for 'one hundred thousand,' in Tagalog as one of the words for 'million.' *Ribo*, *libo* is the regular root of 'one thousand' in most of the languages, but in Samaro-Leytean it is used for 'million,' in Bagabo for 'ten thousand.'

Pang.	dua-n polo-n laksa '200,000.'
	dua-n lasus laksa '2,000,000.'
	dua-n libo-n laksa '20,000,000.'
Ilok.	dua pollo a laksa '200,000.'
	dua riuriu '2,000,000.'
Iban.	dua fulu gatut jibu '2,000,000.'
Igor. (Bon.)	chuwa-n poo-y lifo '20,000.'
Sulu	dua ang-ratus laksa '2,000,000.'

What the derivatives of Ibanag *mariburibu* 'one million' and Pangasinan *nilaksalaksa* 'one hundred million' are, if any are formed, is uncertain.

[1] The derivatives of Hiliguayna *napolo ka-laksa*, Sulu *hangpoh laksa*, are probably made in a similar fashion.

[2] No examples happen to occur, but the following are without doubt correct, at least in the case of Pampangan, e. g.,

Pamp.	adua-ng libo '2,000.'
	adua-ng laksa '20,000.'
	adua-ng gatus '200,000.'
Pang.	dua-n libo-y libo '2,000,000.'

[3] In Pampangan *katakata* 'a number beyond count.'

[4] Cf. Whitney, *op. cit.*, p. 177.

Laksa, although meaning 'hundred thousand' in Sanskrit, is the regular root of 'ten thousand,' but in Bikol it is used for 'million.' *Yota*, although meaning 'ten thousand' in Sanskrit, is the root of 'one hundred thousand' in Tagalog and Magindanao, and of 'million' in Pampangan.[1]

Intermediate Cardinals.

The first intermediate number between 'ten' and 'twenty,' viz., 'eleven,' is expressed as follows in the various languages, viz.:

Tag.	labi-ng isa
Bis. (Ceb.)	napolo ug usa
Bis. (Hil.)	napolo kag { usa / isa }
Bis. (S. L.)	napolo kag usa
Bik.	kagsaro, sangpolo meysaro
Pamp.	labi-n metong
Pang.	labi-n sakey
Ilok.	sangapol(l)o ket maisa kanikadua pol(l)o { ket / -t } maisa
Iban.	karattadday[2]
Igor. (Nab.)	sawal ne saxei
Igor. (Bon.)	simpoo ya isa
Bat.	asa sicharuana a pogo$_{xlvii}$
Kal.	tampolok mai tata
Mag.	sapulu isa, sapulu ngu isa
Sulu	hangpoh tug isa
Bag.	sapolo sabbad

The other teens may be formed from these by substituting the other units for 'one,' e. g., Tag. *labi-ng dalawa*, etc.[3]

[1] In Malay and Javanese the roots *laksa*, *keti*, and *yuta* are used respectively for 'ten thousand,' 'hundred thousand,' and 'million.' Cf. Seidel, *Practische Grammatik der Malayischen Sprache* (Hartlebens Verlag), p. 64; Bohatta, *Prak. Gram. d. Javan. Sp.* (Hartl. v.), p. 49.

[2] The statement in De Cuevas that *minikaruafulu* means 'ten and something more but less than twenty' seems to indicate the possibility of teens like *minikaruafulu tu tadday*, etc., cf. below, p. 222.

[3] In Nabaloi, however, the teens are expressed in several other ways, viz.: a) by addition in compound numerals and in the distributive numerals, e. g., *sampulo tan saxei*; b) without the genitive sign in adverbs and multiplicatives, e. g., *sawal saxei*. The multiplicatives from 'three' upward are made by placing the cardinal before *tope* 'double.' The *ni* which is found in the ordinals, e. g., *sawal ni saxei*, is probably simply a graphic variant of *ne*.

In Ibanag the element that is prefixed to the unit is *kara*, after which an initial consonant, except *w*, is doubled as above, while an initial *a* coalesces with the final *a* of the prefix. The remaining teens are, therefore, *karaddua*, *karattallu*, *karappat*, *karallima*, *karannam*, *karappitu*, *karawalu*, *karassiam*.

In Magindanao the initial *a* of the units *apat* and *anem* is elided after *sapulu*, or these forms are based on the original monosyllabic roots *pat* and *nem*, viz., *sapulu-pat*, *sapulu-nem*.

These forms fall into three classes, viz.: a) those made by simple addition of ten and unit, with or without conjunctive word; b) those in which ten is not expressed, but the unit is accompanied by a word or words meaning 'over,' 'above,' or the like; c) those in which the unit is accompanied by a derivative of the next higher ten, viz., 'twenty.'

To the first class belong the forms in the following languages, the connective being indicated by the words in parenthesis, viz.: connected by conjunction 'and,' Bisayan (*ug*, *kag*), Ilokan (*ket*), Bontok (*ya*), Magindanao (*ngu*); connected by a particle meaning 'having,' Bikol (*may*), Kalamian (*mai*), and Sulu (*tug*); without connective, Magindanao and Bagobo. Magindanao has forms both with and without connective.

To the second class belong the forms in Tagalog, Pampangan, Pangasinan, Ibanag and Nabaloi, and Bikol forms with prefixed *kag*. In all these forms 'ten' is understood. In Tagalog, Pampangan and Pangasinan the unit is modified by a preceding element *labi* 'overplus,' the two being joined by the ligature; the meaning of the 'teens' being thus 'a one overplus,' 'a two-overplus,' etc. In Nabaloi, *sawal* has probably a meaning similar to *labi*, but it governs the unit in the genitive, the teens meaning thus 'an overplus of one,' 'an overplus of two,' etc. In certain derivatives (cf. p. 216, ft. nt. 3) the genitive sign is omitted, probably after the analogy of the numbers intermediate between the other tens, e. g., *chua pulo sarei* 'twenty-one,' etc. In Ibanag the prefix *kara* is perhaps to be analyzed as preposition *ka* 'to' + *da* pronoun of the third person plural; the teens meaning thus 'one, two, etc., to (in addition to) them (i. e., to the ten numbers that have preceded).' In Bikol the prefix *kag* seems to be the conjunction 'and,' the teens thus meaning 'and one,' 'and two,' 'ten' being understood before them.

To the third class belong the forms like Ilokan *kanikaduapollo ket* (or *-t*) *maisa*, and Batan *asa sicharuana a pogo*; for Ibanag, cf. above, p. 216, ft. nt. 2. *kanikaduapollo* and *sicharuana a pogo* are both based on ordinal forms. Batan *sicha* is probably identical with the Pampangan fractional prefix *sika* (cf. below, p. 235); Ilokan *kanika* is the same as the prefix of the numbers intermediate between the higher numerals (cf. below, p. 219). These combinations mean 'the twenty or second-ten one, two, etc.' In Ilokan the *t* is without doubt the original connective, being probably derived from *ti*, the genitive of the article. The connective *ket* means 'and' and is probably due to confusion with the other series of 'teens' like *sanga polo ket maisa*, etc.

The first intermediate number above 'twenty,' viz., 'twenty-one' is expressed as follows in the various languages, viz.:

Tag.	dalawa-ng { powo at isa / powo't isa
Bis. (Ceb.)	kaluhaan ug usa
Bis. (Hil.)	kaluhaan / duha ka-polo { } kag usa / kag isa
	kaluhaan kag may { usa / isa
Bis. (S. L.)	karuhaan kag usa
Bik.	dua-ng polo mey saro
Pamp.	adua-ng polo ampon metong
Pang.	dua-n polo tan sakey[1]
Ilok.	dúa pol(l)o ket maisa
Iban.	duafulu tadday
Igor. (Nab.)	chua pulo saxei
Igor. (Bon.)	chua-n poo ya isa
Mag.[2]	duapulu ngu isa
Sulu	kauhan tug isa

The first intermediate numbers above the other tens may be obtained by substituting the other tens for 'twenty,' e. g., Tag. *tatlo-ng powo at ('t) isa* 'thirty-one,' etc. The other intermediate numbers between the various tens may be obtained by

[1] Not given but practically certain.

[2] These forms are given only by Porter, who employs the conjunction also in the teens, e. g., *sapulu ngu isa* 'eleven.' Judging from the forms of the teens given by Juanmarti, it is possible that the earlier forms heard by him were without conjunction, viz., *duapulu isa*, etc.

substituting the other units for 'one' in these first intermediate numbers, e. g., Tag. *dalawa-ng powo at ('t) dalawa* 'twenty-two,' *tatlo-ng powo at ('t) tatlo* 'thirty-three,' etc.

These intermediate numbers are regularly made by addition of tens and units, the tens preceding. The two are juxtaposed without connective in Ibanag and Nabaloi, and perhaps also in Magindanao (cf. p. 218, ft. nt. 2). In the other languages one or more connectives meaning either 'and' or 'having' are employed as follows, the word in parenthesis indicating the connective, viz.: 'and' in Tagalog (*at*, *'t*), Bisayan (*ug*, *kag*), Pampangan (*ampon*), Pangasinan (*tan*), Ilokan (*ket*), Bontok (*ya*), Magindanao (*ngu*); 'having' in Bikol (*may*) and Sulu (*tug*). In Hiliguayna forms like *kaluhaan kag may usa* both kinds of connectives are used together.

Besides the forms of the numbers intermediate between the tens given above, which are the forms in common use, accounts of another and more original system of forming these numerals have been preserved in a number of the grammars, and in fact this system seems to be still in use in some sections alongside of the common one. These intermediate numerals consist of three parts, viz., the units, which stands last; a preceding modifier based on the ten toward which the count is proceeding; and a joining element between them. The modifier is formed in Pangasinan, Ilokan, and Ibanag by prefixing certain elements to the ten toward which the count is proceeding: in Pangasinan *mika*, in Ilokan *kanika*, in Ibanag *minika*.

The following examples of these forms occur for the intermediate numerals between 'twenty' and 'ninety,' viz.:

Pang.	*Ilok.*	*Iban.*
mika-tlo-n polo	kanika-tlo polo[1]	minika-tallufulu[2]
mikapat a polo[2]	kanikapat polo	
	kanika-lima polo	minika-limafulu[2]
	kanikanem a polo	

[1] The *l* of *polo* is apparently not doubled in these forms.

[2] These forms are assumed on the basis of general analogy and the following forms containing a modifier made from the same unit, viz.,

mikapat na poted—'three and a fraction.'
mikapito-y binting—'six *salapis* (4 reals), and a *binting* (2 reals).'
mikawalo-y binting—'seven *salapis* and a *binting*.'
minikatallu gatut—'over two hundred.'
minikalima ribu—'over four thousand.'

mika-pito-n polo[1]	kanika-pito polo
mika-walo-n polo[1]	kanika-walo polo
	kanika-siam a polo

In Tagalog, Pampangan, and Nabaloi the modifier is formed by prefixing respectively *meyka*, *meka*, and *ka* to the unit indicating the number of the ten towards which the count is proceeding, the word for 'ten' being omitted. The following examples occur for the intermediate numerals as above, viz.:

Tag.	*Pamp.*	*Igor.* (*Nab.*)
meyka-tlo	me-katlo	ka-ddo
meykapat	me-kapat	ka-appat
meyka-lima	me-kalima	
meykanim		
meyka-pito		
meyka-walo		
meyka-siyam		

In Hiliguayna the modifier is apparently made by prefixing *hin* to the ten towards which the count is proceeding. The following examples occur for the intermediate numbers, as above, viz.:

hiñatloan < hin + katloan[2]
hiñap-atan < hin + kap-atan
hiñalim-an < hin + kalim-an

In the numbers intermediate between 'ninety' and 'one hundred,' the modifier is made by prefixing the proper particle to the word for 'hundred,' the ten towards which the count is proceeding. 'Hundred' occurs in the root form except in Pampangan,[3] viz.:

Tag.	meyka-raan
Pamp.	meka-dinalan
Pang.	mika-lasus[4]
Ilok.	kanika-gasut
Iban.	minika-gatut[4]

[1] See preceding page, note 2.

[2] In most of the Philippine languages the combination of *n* + a guttural becomes by reciprocal assimilation *ŋŋ̃* and then *ñ* by simplification of the doubling, as here.

[3] The Hiliguayna form is not given.

[4] Not certain but probably the proper form.

While the exact force of the prefixes of these modifiers is not clear, they all (except Hiliguayna *hin*) seem to be modifications of the ordinal prefixes.[1] This is indicated by the following facts, viz., a) that all of them except *hin*[2] contain *ka*, which is the basis of the ordinal prefixes; b) that *maika*, identical with Tagalog *meyka* and Pampangan *meka*, is used as ordinal prefix in Ilokan and Nabaloi; c) that the numeral after the prefix regularly appears in the form it has in the ordinals, e. g.,[3]

	Modifier	*Ordinal*
Tag.	meykatlo	ikatlo
	meykapat	ikapat
Pamp.	mekatlo	katlo
	mekadinalan	kadinalan
Pang.	mikapat	kapat
Nab.	kaddo	maikaddo

These formations are joined to the following units in several ways, viz., in Tagalog and Pampangan, by the ligature (used only after a vowel; after a consonant it is omitted, the two elements being simply juxtaposed[4]); in Ilokan by *t* which is probably a contraction of *ti* the genitive of the definite article, or by the conjunction *ket* 'and' (cf. above, p. 218); in Pangasinan and Nabaloi by the genitive of the definite article; in Hiliguayna and Ibanag by the sign of the indefinite accusative (I, p. 345).

As an example of these intermediate numerals the forms of 'twenty-one' may be given. They are as follows, viz:

Tag.	meykatlo-ng isa
Bis. (Hil.)	hingatloan sing usa
Pamp.	mekatlo-n metong
Pang.	mikatlo-n polo na sakey[5]
Ilok.	kanikatlo polo { ket / 't } maisa

[1] The explanation of these intermediate forms given in Dr. Seiple's article *The Tagálog Numerals* (JHU. Circs. No. 163, June, 1903, p. 80), while possible from the standpoint of Tagalog and Bisayan alone, is untenable when the other languages are taken into consideration.

[2] *Hin*, however, is followed by the *ka* of the ten.

[3] In Nabaloi, however, *kaappat* and *maikapat* do not correspond.

[4] The ligature in these forms seems to be indiscriminately *ng* or *n*.

[5] Not given, but cf. *mikatlo-n polo na talo* '23.'

Iban. minika tallufulu tu tadday[1]
Igor. (Nab.) kaddo ne saxei

In Ilokan, Ibanag, and Batan similar forms are found in the teens (cf. above, p. 218).

The meaning of the connectives seems to be 'with respect to,' 'as far as — is concerned,' though it is possible that the relation between unit and modifier in Tagalog and Pampangan is that of noun and adjective; the forms of 'twenty-one' for example, therefore, mean 'thirty as far as one concerned,' the first or 'one' step towards 'thirty' having been taken; for *ket* in the Ilokan forms, cf. above, p. 218. The word for 'ten' is understood in Tagalog, Pampangan, and Nabaloi, just as it is in the case of the teens.

The modifiers of these numerals may be used alone[2] to indicate an indefinite number, more than the ten below and not so much as the ten on which the modifier is based; in this case in Tagalog and Pampangan 'ten,' which is understood in the definite numbers, reappears. In Ilokan these forms seem to be used also to indicate the even ten below the one on which the modifier is based, e. g.:

Tag. meykatlo-n polo 'some twenty.'
Pamp. mekalima-ng polo 'some forty.'
Pang. mikatlo-n polo 'some twenty.'
Ilok. kanikapat a polo 'some thirty' or 'even thirty.'
Iban. minikatallufulu[3] 'some twenty.'

In Ilokan and Ibanag this formation may be used to indicate an indefinite teen, e. g.,

Ilok. kanikaduapolo } 'some ten.'
Iban. minikaruafulu }

The intermediate numbers above 'one hundred' in so far as they are given by the grammars, are made in general by addition, the larger numeral preceding the smaller, and the conjunction 'and' standing between the last two, e. g.,

Tag. sangdaan at } isa '101.'
sangdaa't }
sangdaan at dalawa-ng powo '120.'

---

[1] Not given, but cf. *minika limafulu tu pitu* '47.'

[2] No examples occur in Hiliguayna and Nabaloi.

[3] Assumed on the basis of *minikaduafulu* 'some ten,' and *minikatallugatut* 'over two hundred.'

Tag. sangdaan dalawa-ng powo { at / 't } isa '121.'

sanglibo { at / 't } isa '1001.'

sanglibo at dalawa-ng daan '1200.'

sanglibo dalawa-ng daan dalawa-ng powo't isa '1221.'

etc., etc.

Similarly in the following languages, the word in parenthesis being the word for 'and,' viz., Cebuan (*ug*), Hiliguayna (*kag*), Pangasinan (*tan*), Ilokan (*ket*), Nabaloi (*tan*), Bontok Igorot (*ya*), Magindanao (*engu*, *ngu*).

In Cebuan the form *usa ká-libo ug may usa* '1001' with double connective *ug* and *may* is given by Encina.[1]

In Hiliguayna it is possible that forms with the double connective *kag may* like *kaluhaan kag may usa* 'twenty-one' are also formed.[2]

In Nabaloi, *tan* seems to be used wherever an addition is to be indicated;[3] in these compound numbers the teens are expressed by 'ten and one' etc., instead of by *sawal ne* as above; e.g.,

sandasus tan sampulo tan saxei '111.'

In Bontok in some of the higher numerals a particle *nan*, probably identical with the *nan* used in forming distributives (cf. below, p. 242), is employed in addition to *ya* 'and,' e. g.:

sinpoo ya nan chuwa lifo '12,000.'

sinpoo ya nan tolo lifo '13,000.'

In Bagobo the conjunction is omitted in the forms that are given, viz.,

sabbad gatos sapolo '110.'

sabbad mararan sabbad gatos '1100.'

Ibanag, to judge from the form of the numbers intermediate between the tens, e. g., *duafulu tadday* 'twenty-one,' probably also dispenses with the conjunction.

In Samaro-Leytean, when the compound number consists of a power of 'ten'+any number less than 'one hundred,' the power of 'ten' is followed by the word for 'having' *mey*, after

[1] *Grammatica bisaya-cebuana*, Manila, 1885.

[2] Cf. Mentrida-Aparicio, *Arte de la lengua bisaya-hiligayna*, Tambobong, 1894, p. 21.

[3] This assumption is based on the form of the numerals for one hundred+the teens, as no other compound numerals involving the same principle are given.

which the remaining part of the numeral has the same form it would have if standing alone. If the number contains two or more powers of 'ten,' the lowest is connected with the numbers below 'one hundred' as above, and the higher power or powers are placed before the lowest power without connective, e. g.:

usa ka-gatos mey usa '101.'
usa ka-gatos mey karuhaan '120.'
usa ka-yokot mey usa '1001.'
usa ka-gatos mey katloan kag usa '131.'
unum ka-yokot, duha ka-gatos mey napolo '6210.'
tolo ka-ribu, duha kayokot, lima kagatos mey kapatan kag walo '3,002,548.'

In Bikol the word for 'having' *mey*, *mei*, seems to be used between the two lowest elements of a compound number, e. g.,

sanggatos mei saro '101.'
sanggatos, apat na palo mei tolo '143.'
sangribo, walo-ng gatos, pito-ng polo mei siam '1879.'

In Sulu when the compound number consists of two parts,[1] they are connected by *tug* 'having,' e. g.,

angratus tug isa '101.'
angratus tug kauhan '120.'
angibu tug angratus '1100.'

In Pampangan these intermediate numbers are regularly indicated in a way similar to the teens by *lalo* or *lawit* 'overplus' followed by the hundred, thousand, etc., from which the count is proceeding (*lalo* taking the ligature), and this in turn followed by the number above the even hundred, thousand, etc., which may be connected with the preceding by *ampon* or *at* 'and'.[2] 'Hundred' is used in the root form, e. g.:

lalo-n / lawit } dalan (ampon) metong '101.'
lalo-n dalan (ampon) labi-n metong '111.'
lawit dalan (ampon) lima-ng polo '150.'
lawit libo lima-ng dalan '1500.'
lalo-n libo't walo-ng dalan mekanum metong '1851.'

---

[1] No examples of numbers consisting of more than two parts are available.

[2] At least according to Bergaño's grammar published in 1729. In all probability, however, forms made after the Spanish fashion, e. g., **dinalan ampon metong*, etc., are in use here as in the other languages (cf. the adverbial forms, p. 247, below).

lawit libo anam a dalan ampon mekadinalan siam '1699.'
lawit adua-ng laksa mekasiam atlo '20,083.'
lalo-ng laksa walo-ng libo pitu-ng dalan mekalima-n lima '18745.'
lawit adua-ng sangyota atlo-ng gatus mekalima-n anom a libo ampon anam a dalan at mekatlo-n anam '2,346,626.'

As appears from these examples *lalo* or *lawit* is used only once, the remainder of the number being expressed in general as in English with the exception of the intermediates with prefixed *meka.*

The ancient system of numeration discussed above (p. 219 ff.). was also employed for these intermediate numbers, the modifier of the unit being made according to rule on the basis of the next higher hundred, thousand, etc., e. g.,

Tag.	meykatlo-n daan isa '201.'
Pamp.	mekadua-n dalan a metong '201.'
Pang.	mikadua-n lasus na sampolo '110.'
Ilok.	kanikadua ribu ket dua gasut '1200.'

In general in Pampangan not more than one *mika* form, and in Pangasinan not more than two *mika* forms are used in succession in the same compound number, forms made by addition being employed after the first, e. g.,

Pamp. mekatlo-n dalan apat a polo ampon anam '246.'
Pang. mikadua-n libo na mikadua-n lasus na dua-n polo tan lima '1125.'
not, **mekatlo-n dalan mekalima-n anam*
and **mikadua-n libo na mikadua-n lasus na mikatlo-n polo na lima.*

The modifying element of these intermediate forms may be used alone as in the case of the tens, e. g.,

Pamp.	mekatlo-n dalan	'between two and three hundred.'.
	mekapat libo	'between three and four thousand.'
Pang.	mikadua-n lasus	'between one and two hundred.'

In Ilokan they may also be used for the even hundreds, etc., as in the case of the tens, e. g.,

kanikatlo gasut	'between two and three hundred' or 'even two hundred.'
kanikapat a gasut	'between three and four hundred' or 'even three hundred.'

In Tagalog, however, in the numbers between the first and second hundred, first and second thousand, etc., a formation similar to that of the teens was employed, viz., *labi* 'overplus' followed by the oblique of the number (hundred, thousand, etc.) from which the count was proceeding, and this followed by the number above the even hundred, thousand, etc. The number above the even hundred, etc., is modified by the preceding complex like an adjective, the ligature sometimes standing between them, and the literal meaning of these numerals being 'a more-than-a-hundred one,' etc., e. g.:

labi sa raan isa '101.'
labi sa raan sang powo '110.'
labi sa raan labi-ng isa '111.'
labi sa raan dalawa-ng powo '120.'
labi sa raan meykatlo-ng isa '121.'
labi sa libo-n isa '1001.'
labi sa laksa dalawa-ng powo '10,020.'
labi sa yota-n tatlo '100,003.'

Appendix (Cardinals given by Montano[1]).

	Samal	*Manobo*	*Tagakaolo*	*Bilan*	*Atas.*
1	isa	sabad	isa	anisa	sakkad
2	dua	kadua	dua	aluu	arua
3	too	ikatlo	katlo	atlo	tatlo
4	upat	upat	ufat	faat	appat
5	lima	lima	lima	lima	limma
6	ikaunum	ikaunum	kanuon[2]	aguaman[2]	annam
7	ikapito	ikapito	fito	nagfito	pitto
8	uao	ualo	kaulian[2]	gualo	ualo
9	siam	siao	siam	gasium	siau
10	sampo	polo	samfolo	gasfaolan[2]	sapulo
11	sampo isa	polo isa	samfolo tag isa	sanfolo satu	sapulo isagkad
20	kauaan	dua polo	karuan	aluu folo	arua-n pulo
30	atloan[3]	lolo polo[3]	katloan	atlo folo	atadlu-m pulo
100	sanggatus	sabad dagatus	sanggatus	?	sakkad na gatus
1000	sangman	sabad mararan	sangmaala	amlibo	sakkad na mararan

[1] Cf. above, p. 199, ft. nt. 3.
[2] Probably miswritten.
[3] Probably mistakes for *katloan, tolo polo.*

In a number of cases the author seems to have confused ordinals with cardinals, so in 'two' in Manobo, in 'three' in Manobo and Tagakaolo, in 'six' in Samal, Manobo, and Tagakaolo, in 'seven' in Samal and Manobo, perhaps in 'eight' in Tagakaolo, and in 'nine' and 'ten' in Bilan, where *ka* has become *ga* (cf. *agu* 'I' for *aku*). Bilan 'six' and 'eight' may also be ordinal forms. Bilan 'seven' is apparently a verbal form.

Intervocalic *l* is lost in Samal (cf. I, p. 333 f.); *p* becomes *f* in Tagakaolo and Bilan; an intervocalic consonant is often doubled in Atas. 'Ten' and its powers are regularly preceded by a prefix meaning 'one' except 'ten' in Manobo.

The forms that call for remark are the following, viz.:

1—*sabad* is the same as Bagobo *sabbad* without doubling; *anisa* is probably *a* (articular particle) + *n* (ligature) + *isa*; *sakkad* is probably *sa*+*kad* (numeral coefficient?) with phonetic doubling.

2—in *aluu* the *a* is probably articular, *luu*, a modification of **lua* for **dua*; *arua* has the same articular (?) *a*.

3—*too* is for *tolo* with loss of intervocalic *l* as in *uao* 'eight,' *po* 'ten'; *atlo* has an articular (?) *a*.

4—*faat* has been made dissyllabic by splitting the *a* of **fat* < **pat*.

6—*kanuon* is perhaps a mistake for **ka-unom*; *aguaman*, for **aga-unam*, the initial *a* being still difficult to explain.

8—*uao* is for *ualo* with loss of intervocalic *l*; *kaulian* seems to contain the suffix *an*, the form may possibly be a mistake for **kaualoan* 'eighty,' instead of an ordinal formation; *gualo* is probably for **ga-ualo*.

9—*siao*, *siau* are to be explained like Magindanao *siau*; *gasium* is a modification of **ga-siam*.

10—*gasfaolan* is probably for **ga-sa-falo-an*, with prefix *sa* 'one,' and suffix *an*.

Teens—The teens seem to be formed by addition without connective except in Tagakaolo, where *tag* (=Sulu *tug*) is employed; in *isagkad*, miswritten for *isakkad*, *i* is probably ligature.

Tens—The tens in Samal and Tagakaolo are formed as in Bisayan and Sulu; in the other languages by multiplication, the ligature being used in Atas. Samal *kauaan* is for **kaluaan* <

**ka-dua-an*; Atas *atadlum polo* is phonetic spelling for **atatlo-n polo.*

100—The root word is *gatus*; Atas *na* is probably ligature; *sabad da gatus* probably represents *sabad a gatus* with ligature *a*.

1000—Besides the familiar root words *libo* and *dalan* (in *mararan*), two new ones appear, viz., *man* and *maala*; *amlibo* is probably articular *a*+ligature *m*+*libo*; Atas *na* is to be explained as in '100.'

Ordinals.

The ordinals, with the exception of the first, are made from the cardinals with the following prefixes, viz.:

Tag., Bis., Bik., Iban., Mag.	ika
Bat.	icha (= ika)
Pamp., Sulu, Bag.	ka
Pang.	ka,[1] onkoma, koma
Ilok.,	maika, ka
Igor. (Nab.)	maika, mai

In Batan and Ibanag the ordinals, except the first in Ibanag, are regularly followed by the genitive of the third personal pronoun, singular, viz., *na*, in Batan; singular or plural, viz., *na* or *da*, in Ibanag. As the Ibanag forms, however, are usually given in DeCuevas' grammar without these suffixes, they will be omitted in giving the ordinals here.

In Bontok Igorot the numeral adverbs are used as ordinals (cf. below, p. 245 ff.).

'First' is expressed as follows in the various languages, viz.:

Tag.	naona
Bis. (Ceb.)	nahaona
Bis (Hil.)	nahaona
Bis. (S. L.)	siapa, ona, nahaona, siahan pa
Bik.	enot
Pamp.	mona
Pang.	inmona (*pret.*), onona (*pres.*, *fut.*)
Ilok.	omona
Iban.	olu

[1] Those made with *ka* signify anyone of a certain number, e. g., *kalima* is anyone of a group of five; anyone of this group is *kalima* 'fifth' with regard to the other four.

Bat.	ichasana
Igor. (Nab.)	mapangdu
Mag.	muna
Sulu	kaisa
Bag.	ona, tagna

In Batan and Sulu the forms are made with the regular ordinal prefix, in Sulu on the basis of *isa* 'one,' and in Batan probably on the basis of the particle *sa*, though *ichasana* may represent a contraction of **icha-asa-na*. The majority of the other forms are made from a root *una*, *ona* meaning 'first, beginning.' This occurs unchanged in Samaro-Leytean and Bagobo, but usually it is combined with verbal particles or modified like a verbal root, the meaning being 'acting as first,' or 'being first,' viz.,

Tag.	na-ona
Bis.	naha-ona
Pamp.	m-ona
Pang.	inm-ona, on-ona (*redup.*).
Ilok.	om-ona
Mag.	m-una

Bagobo *tagna* perhaps contains *ona*. Ibanag *olu* is the common Philippine word for 'head.' Samaro-Leytean *siapa* and *siahan pa* are perhaps *sia*, the pronoun of the third person singular, and *siahan*, a derivative with passive suffix *an*, followed by the adverb *pa*, which ordinarily means 'still, yet,' but which here no doubt simply emphasizes the preceding word. The original meaning was probably something like 'it, the one *par excellence*.' Nabaloi *mapangdu* probably contains the adjectival prefix *ma*. The meaning of the roots of Bikol *enot*, Nabaloi *mapangdu*, and Bagobo *tagna* is not certain.

The remaining ordinals from 'two' to 'nine' are made regularly by prefixing the proper particle to the cardinal with the following exceptions, either particle being used in those languages which have two, except in Nabaloi, where *maika* alone is employed.

a) The *a* of the prefix regularly coalesces with the *a* of units with initial *a*, e. g.,

Tag.	ikapat 'fourth.'
Pamp.	kanam 'sixth.'

Iban.	ikappat 'fourth.'
Igor. (Nab.)	maikapat[1] 'fourth.'
Bag.	kannam 'sixth.'

Bikol is an exception to this rule, e. g.,

ikaapat[2] 'fourth.'
ikaanom 'sixth.'

In Ilokan, 'four' and 'six' are irregular, being made as if the cardinals began with *a*. They are, viz.,

maikapat, kapat 'fourth.'
maikanem, kanem,[3] 'sixth.'

In 'four' and 'six' the bases may be *pat* and *n-m* instead of *apat* and *an-m;* forms like Bisayan *ika-upat*, *ika-unom*, Bikol *ika-apat*, *ika-anom* argue for the dissyllabic bases; forms like Ilokan *maikapat*, *maikanem*, for the monosyllabic. In Pampangan 'two' and 'three' the ordinals are probably based on *dua* and *tlo*, not on *adua* and *atlo*.

b) The second ordinal is irregular in Tagalog and Nabaloi, viz.,

Tag.	ika-lawa, ika-lua
Igor. (Nab.)	maikadgua

and in Bagobo a special word *sosog* occurs alongside of the regular formation. In Tagalog in *ikalawa* the ordinal particle has either been prefixed to a shortened form of the cardinal, or *lawa* represents a modification of a more original **dawa* for **duwa* (cf. above, p. 204); *ikalua* may be a shortened form of *ikalawa*, or it may represent **ika-dua*. In Nabaloi the form is derived from **maikad-wa* < **maika-dua*, the *u* becoming *w*, due to the change in the arrangement of syllables, and then changing to *gu* according to rule (I, p. 332), and the *d* in this combination escaping the regular change to *ch* (I, p. 333).

c) The third ordinal is made from a base *tlo* in several of the languages, viz.,

---

[1] The doubling of the cardinal *appat* seems to be omitted here.
[2] Written *ikaapot*, doubtless simply a mistake for *ikaapat*.
[3] Not given, but practically certain.

Tag., Bik.	ika-tlo
Pamp., Bag.	ka-tlo
Pang.	ka-tlo, koma-tlo
Ilok.	maika-tlo, ka-tlo
Bat.	icha-tdo-na

Cebuan and Hiliguayna have the two forms *ika-tlo* and *ika-tolo*; Nabaloi has the form *maikaddo* (by assimilation from **maikatdo* < **maikatlo*).

d) The sixth ordinal in Hiliguayna has developed a secondary glottal catch, viz., *ikan-um*; Samaro-Leytean has besides the regular form *ikaunom*, a form *ikanum*, based on *anum* or *num* (cf. a, above); in Nabaloi an analogical *d* borrowed from *maikadima* 'fifth' appears before the cardinal; e. g., *maika-dannim.*

In the case of the tenth ordinal the particles are prefixed, as in the ordinals from 'two' to 'nine,' sometimes to the root, sometimes to the full form of the cardinal; in Batan the suffix *na* follows the prefix, viz.,

Tag.	ika-powo, ika-sangpowo, ikapolo
Bis. (Ceb.)	ika-polo
Bis. (Hil.)	ika-polo, ika-napolo
Bik.	ika-polo, ika-sangpolo
Pamp.	ka-polo
Pang.	ka-polo, koma-polo
Ilok.	maika-pollo, ka-pollo[1]
Iban.	ika-fulu, ika-mafulu
Igor. (Nab.)	maika-sampulo
Bat.	ichasana a pogo
Sulu	ka-hangpoh
Bag.	ka-sapolo

The remaining ordinals, with the exception of certain intermediate numerals, are made by prefixing the proper prefixes to the cardinals. In Pangasinan from 'twenty' upward the two series of ordinals have the same form, *koma* being used as prefix, or the *ka* series may take the prefix *onkoma*; in Nabaloi from 'eleven' upward, the prefix *mai* alone is used, e. g.,

[1] Not given, but probably correct.

Pang.	koma-dua-n polo 'twentieth'
	onkoma-dua-n polo 'any one of twenty, twentieth.'
Igor. (Nab.)	mai-sawal ne saxei 'eleventh'
	mai-chuwa polo 'twentieth.'

In the powers of ten the ordinal particles are sometimes prefixed to the root form of the cardinal, sometimes to the fuller form. In Pampangan[1] except in *dinalan*, and in Pangasinan they are prefixed to the root form, e. g.,

	100th	*1000th*
Pamp.	ka-dinalan	ka-libu
Pang.	koma-lasus	koma-libo

In Tagalog they are usually prefixed to the fuller form, though forms derived from the simple root also occur, e. g.,

ika-sangdaan } 'one hundredth.'
ika-raan }

In Hiliguayna, Sulu, and Nabaloi, they are prefixed to the fuller form. In Cebuan they may be prefixed to either the root or the fuller form, e. g.:

Bis. (Hil.)	ika-isa-ka-libo	'thousandth.'
Bis. (Ceb.)	ika-usa-ka-gatos ika-gatos	'hundredth.'
Sulu	ka-ang-ratus	"
Igor. (Nab.)	mai-san-dasus	"

In the other languages the forms are not given.

The intermediate numerals with prefixed *meyka* in Tagalog and *meka* in Pampangan may take the ordinal prefix regularly, or be used unchanged as ordinals, e. g.,

Tag.	ika-meykatlo-ng apat meykatlo-ng apat	'twenty-fourth.'
Pamp.	ka-mekatlo-n lima mekatlo-n lima	'twenty-fifth.'

In Tagalog moreover there was a third series of forms made by dropping *mey* after the prefix *ika.*[2]

---

[1] The ordinal of *sangyota* 'million,' which does not occur, is probably *ka-sangyota*, *sangyota* being treated as a root.

[2] The only example of this formation (given by Totanes, p. 106) is *ang icatatlong apat* 'the twenty-fourth,' which seems to be a mistake for *ika-katlo-ng apat.*

The only example given in Pampangan of an ordinal made from forms with *lalo* or *lawit* is without ordinal prefix, viz.,

ing lawit dalan apat 'the hundred and fourth.'

In Ibanag the numbers intermediate between the tens may be expressed regularly by prefixing *ika* to the cardinals made by addition, or by placing the units before the ten towards which the count is proceeding with prefixed *pinaka*, e. g.,

ika-ruafulu tadday } 'twenty-first.'
tadday pinakallufulu[1] }

This particle *pinaka* may be the same as Tagalog *pinaka*, which indicates 'that which takes the place of, passes as, etc.,' e. g., *pinaka-tinapay* 'that which is used instead of bread' from *tinapay* 'bread.' The idea of the complex is perhaps that instead of 'thirty,' etc., we have 'one,' i. e. the one in the decade that ends in 'thirty,' etc.

The particle *ka* which forms the basis of most of the ordinal prefixes seems to be identical with the nominal prefix *ka*, which indicates one of a number of units that are associated in some way or belong to the same class, e. g., Tagalog *ka-tawo* 'one of a number of men, a single man' from *tawo* '*homo*, people,' *ka-tolong* 'one of those that help one another, a single helper' from *tolong* 'to help.' *Ka* prefixed to a cardinal would thus mean 'one of two, three, etc.,' i. e., the second, third, etc., with regard to the others of the same company. From this associative meaning, which is still the only one these forms have in Pangasinan, their use was extended, so that they were employed as ordinals in any connection. In some of the languages additional particles were prefixed or infixed; *i* in *i-ka*, *i-cha*, *ma* and *i* in *ma-i-ka*, *om* in *k-om-a*, *on* in *on-koma*. The prefix *i* may possibly be identical with the articular particle *i*, but it is more likely, as seems to be indicated by the fact that *om* and *on* in *koma* and *onkoma* are also verbal particles, that it is identical with the passive particle *i*; the forms with *ika* thus meaning 'that which is made one of two, three,' etc. The particles *on* and *om* indicate 'becoming, a passage from one state to another,' e. g., Tagalog *g-um-aling* 'to become good' from *galing* 'good,' Pangasinan *on-bato* 'to become

[1] The only example given; *llu* in *pinakallu*, probably represents *tlu*, cf. below, p. 236.

stone' from *bato* 'stone'; hence forms with *koma* and *onkoma* indicate 'becoming or having become one of two, three, etc.' The prefix *ma* is probably identical with the adjective prefix *ma*. Nabaloi *mai* is probably simply a shortened form of *maika*.

Fractions.

The statements in the various grammars with regard to the fractions are very meager indeed, and in many of them no mention of fractions is made.

Generally speaking, with the exception of the word for 'half' they are identical with or based on the ordinals.

The words for 'half' in the various languages are, viz.:

Tag.	kalahati
Bis. (Ceb.)	katonĝa
Bis. (Hil.)	ikatunĝa, katunĝa
Pamp.	sikadua
Pang.	kapaldua
Iban.	pakkarua
Igor. (Nab.)	kaguchua
Bat.	karag$_{xlvl}$
Sulu	ang sipak
Bag.	katonĝnĝa

In Pampangan, Pangasinan, Ibanag, and Nabaloi 'half' is a derivative of 'two,' the prefixes all containing the ordinal particle *ka* in connection with some other element. In Pampangan and Ibanag the prefixes are the same as those used in the formation of the other fractions (cf. below). In Pangasinan an additional element *pal* or perhaps *apal*, in Nabaloi an additional element *gu* is inserted between the ordinal prefix and 'two.' Tagalog *kalahati* consists of a root *hati* with prefixed *ka* and infixed *la*,[1] the formation being thus similar to that of Pangasinan and Nabaloi. In Cebuan, Hiliguayna, and Bagobo the ordinal particles *ika* or *ka* are prefixed directly to a root *tunĝa*, *tonĝa*; the doubling in Bagobo is probably phonetic. In Batan *karag*, *ka* is perhaps ordinal prefix. In Sulu the root *sipak* is without ordinal particle, simply taking the prefix *ang* 'one, a' (cf. below, p. 236).

[1] Cf. *dalawa* 'two,' p. 204 above.

The remaining fractions are formed as follows:

In Tagalog they are identical with the ordinals, though in an older period of the language they were formed by prefixing *sa* to the ordinals,[1] e. g.,

sa-ikatlo 'third.'
sa-ikapat 'fourth.'

Fractions derived from intermediate numerals in *meyka* had one of three forms, viz.,

sa-meykatlo-ng isa
ika-meykatlo-ng isa } 'a twenty-first.'
sa-ika-meykatlo-ng isa

The forms identical with the ordinals may stand alone or may modify the noun *bahagi* 'part,' e. g.,

ikatlo
ikatlo-ng bahagi } 'a third.'

In Cebuan and Hiliguayna they consist of *bahin* 'part' modified by the preceding ordinal, e. g.,

Ceb. ikatolo ka-bahin 'one third.'
Hil. ikagatos ka-bahin 'a hundredth.'

In Pampangan they are formed by prefixing *si* to the ordinal even in the case of the first of the series (cf. above), e. g.,

si-katlo 'third.'
si-kapat 'fourth.'

This *si* is probably a contraction of *sa-i*, the formation being thus the same as the Tagalog. The same contraction is found in Tagalog in *sikapat* (<*saikapat*) 'real' *sikolo* (<*saikawalo*) 'half real.'

In Pangasinan they are formed up to 'tenth' by prefixing an additional syllable *ka* to the ordinals with prefixed *ka*, e. g.,

ka-katlo 'third.'
ka-kapat 'fourth.'

From 'eleventh' upward they consist of the noun *poted* 'part' modified by a preceding ordinal with prefixed *koma*, e. g.,

komalabi-n sakey a poted 'an eleventh.'

[1] Cf. Totanes, *Arte de la lengua tagala*, p. 107, José, *Arte y reglas de la lengua tagala*, p. 729. This formation is still preserved in *saikapat*, *saikawalo* (usually contracted to *sikapat*, *sikolo*), one-half and one-fourth respectively of a *salapi*, a piece of money worth four reals.

In Ibanag they are formed by prefixing *pakka* to the cardinal; the forms given are, viz.,

pakkallu 'a third.'
pakkappat 'a fourth.'

These forms probably represent **pakka-tlu* and **pakka-appat* or **pakka-pat.* This prefix *pakka* is, perhaps, the same as the basis of *p-in-aka* (cf. above, p. 233), which contains the infix *in.* If this is so, the meaning is something like 'that which stands for three, four, etc., has a three, four, etc., quality.'

In Sulu they seem to consist of special words, as in the case of 'half,' e. g.,

ang utud 'a fourth.'

When the numerator of the fraction is more than one, the fraction is expressed in Tagalog by cardinals as 'so many of so many parts,' e. g.,

tatlo nang apat na bahagi 'three-fourths.'
pito nang walo-ng bahagi 'seven-eights.'

In Ibanag and Sulu the word indicating the fraction is preceded by the cardinal indicating the amount of the numerator, e. g.,

Iban. rua pakkallu 'two-thirds.'
Sulu to ang-utud 'three-fourths.'

The combination of an integer and a fraction seems to be indicated in Sulu by the fraction preceded by the ordinal of the next higher unit,[1] e. g.,

ka-to ang-sipak 'two and a half (the third half).'

In Ibanag it is expressed by connecting the integer and the fraction by the conjunction *tapenu*, which ordinarily means 'in order that,' but which here probably means simply 'tending towards,' 'in addition to,' e. g.,

lima tapenu rua pakkallu 'five and two thirds.'

In Pangasinan it is expressed by the next higher unit with prefixed *mika* followed by the fraction, the two being connected by *y* or *na*, e. g.,

---

[1] Cf. German *dritthalb* 'two and a half,' *vierthalb* 'three and a half, etc.

mika-dua-y kapaldua 'one and a half.'
mika-tlo-y kakatlo 'two and a third.'
mikapat na poted 'three and a fraction.'

Distributives.

Distributives may be either cardinal or ordinal. The cardinal distributives have sometimes the meaning 'so many at a time,' sometimes that of 'so many to each.' Some languages have a separate set of numerals for each meaning. The ordinal distributives have the meaning 'every first, second, third,' etc.

The cardinal distributives are made from the cardinals by reduplication, by prefixed particles, or by both together. The chief prefixes used are, viz.:

Tag., Bik.	tig, man
Bis.	tag, tinag (Ceb.)
Pamp.	ti, tia
Pang.	san, tag, tungal
Ilok.	sag, tungal
Iban.	taggi, ta
Igor. (Nab.)	san-sis-kei
Mag.	ngaga, kaga

The prefix of 'ten' and its powers is usually different from that of the other numbers.

In Bikol and Pampangan the particles *on* and *an* respectively, in Bontok the complex *-s nan isa* or *is nan isa* are used as suffixes. Reduplicated forms are found in Tagalog, Hiliguayna, Samaro-Leytean, Bikol, Pampangan, Pangasinan, Ilokan, and Ibanag.

The forms of the first five numerals are, viz.:

	1	2	3	4	5
Tag.	tigisa	tigalawa	tigatlo, tigatigatlo	tigapat, tigatigapat	tiglilima, tiglima
	isaisa	daladalawa	tatlotatlo	apatapat	limalima
Bis. (Ceb.)	tagsa	tagudha	tagotlo	tagupat	tagilma
	tinagsa	tinagudha	tinagatlo	tinagupat	tinagilma
Bis. (Hil.)	tagusa	tagduha	?	?	?
	tagisa				
	tagsa				
	tagisaisa[1]	tagduhaduha[1]	?	tagapatapat[1]	?
Bis. (S.-L.)	tagusa	tagduha	?	?	?
	tagsa				
	tagsatagsa				
Bik.	tigsaro	?	?	?	?
	tigsarosaro[2]	?	?	?	?
	manarosaro[3]	manuadua[3]	manolotolo[3]	?	?
	sarosaroon	duaduahon[4]	?	?	?
Pamp.	tungal / tionan	tidua	titlo	tiapat	tialima
	tungaltungal	tiduatidua	titlotitlo	tiapatapat	tialimalima
Pang.	sansakey	sandedua	santatlo	sanepat	sanlilima
	sansasakey	sandererua	santatatlo	saneepat	
Ilok.	sagmaimaisa	sagdudua	saggatlo	sagpapat	?
Iban.	taggitadday	taggirua	taggitallu	?	?
	tattadday	taddurua	tattallu		tallilima
Igor. (Nab.)	sansiskei-saxei,	-chua,	-taddo	-appat	-dima.
Igor. (Bon.)	isa-s nan isa,	chua-,	tolo-,	?	?
Mag.	ng̃agaisa	ng̃agadua kagadua[5]	ng̃agatelu	ng̃agapat	ng̃agalima

[1] These reduplicated forms are given only by Lozano.

[2] The form *tigsararo*, which is also given, seems to be a mistake for *tigsarosaro*.

[3] In most of the Philippine languages the combination of *n* + a dental becomes by assimilation *nn* and then by simplification of the doubling *n*, as here. [4] For the *h* cf. I, p. 337. [5] Cf. Juanmarti, *op. cit.*, p. 64.

In Tagalog the series with *tig* has the meaning of 'so many apiece,' and the reduplicated series, the meaning of 'so many at a time;' and the same difference in meaning is found between the forms with prefix *tag*, and those with prefix *tinag* in Cebuan; between the Bikol forms with prefixes *tig* and *man*, and those with suffixed *on*; and between the unreduplicated and reduplicated series in Pampangan. In the other languages the distributives have probably both meanings, certainly so in Hiliguayna and Pangasinan.

Some of the cardinals have a modified form after the various prefixes. Tagalog *tigalawa* and *tigatlo* are made on the basis of *lawa* (cf. above, p. 204) and *tlo*; the *a* of *tiga* is probably due to the analogy of *tigapat*. Bisayan *tagsa* is probably syncopated from *tagusa* or *tagisa*; it is unlikely that it is formed directly by prefixing *tag* to the root particle *sa*. Cebuan *tagudha*, *tagotlo* and *tagilma* are due to a metathesis of **tagduha*, **tagtolo*, and **taglima*. In Pampangan 'one' is represented by *tungal* or *tionan*; *tungal* is found also as prefix (cf. below, p. 241); *tionan* is perhaps derived from *ona*, the root of most of the ordinals for 'first,' being analyzed as **ti-ona-an*, *ti* being distributive prefix and *an* passive suffix. 'Three' is made on the base *tlo* as in Tagalog. In Pangasinan, 'two,' 'three,' and 'four' are made on the bases *dedua*, *tatlo*, *epat*; *dedua* is a reduplicated form, *e* representing an indistinct unaccented vowel; *tatlo* is the regular form of 'three' in many of the languages (cf. above, p. 205); *epat* is *pat* with *e*, probably equal to articular *i* (cf. above, p. 205). In Ilokan, *saggatlo* is probably derived from **sag-tatlo* by assimilation; *sagpapat* is probably for **sag-apapat* with reduplication like that of the numeral adverbs of 'four' and 'six' in Pampangan (cf. below, p. 246). In Magindanao the final *a* of the prefix *ngāga* and the initial *a* of *apat* coalesce, or the form is made on the basis *pat*.

All the forms of these distributives not here mentioned, together with those from 'six' upward, are made according to the following rules. Some additional examples of the numbers from 'six' upward will be given.

In Tagalog in the first series *tig* is prefixed to the cardinal, from 'five' upward, usually with reduplication of the first syllable of the cardinal, though sometimes without reduplication, except in the case of the powers of 'ten,' which take the prefix *man*. 'Ten' itself may take either *tig* or *man*, *tig* being

	1	2	3	4	5
Tag.	tigisa	tigalawa	tigatlo, tigatigatlo	tigapat, tigatigapat	tiglilima, tiglima
	isaisa	daladalawa	tatlotatlo	apatapat	limalima
Bis. (Ceb.)	tagsa	tagudha	tagotlo	tagupat	tagilma
	tinagsa	tinagudha	tinagatlo	tinagupat	tinagilma
Bis. (Hil.)	tagusa	tagduha	?	?	?
	tagisa				
	tagsa				
	tagisaisa[1]	tagduhaduha[1]	?	tagapatapat[1]	?
Bis. (S.-L.)	tagusa	tagduha	?	?	?
	tagsa				
	tagsatagsa				
Bik.	tigsaro	?	?	?	?
	tigsarosaro[2]	?	?	?	?
	manarosaro[3]	manuadua[3]	manolotolo[3]	?	?
	sarosaroon	duaduahon[4]	?	?	?
Pamp.	tungal, tionan	tidua	titlo	tiapat	tialima
	tungaltungal	tiduatidua	titlotitlo	tiapatapat	tialimalima
Pang.	sansakey	sandedua	santatlo	sanepat	sanlilima
	sansasakey	sandererua	santatatlo	saneepat	
Ilok.	sagmaimaisa	sagdudua	saggatlo	sagpapat	?
Iban.	taggitadday	taggirua	taggitallu	?	?
	tattadday	taddurua	tattallu		tallilima
Igor. (Nab.)	sansiskei-saxei,	-chua,	-taddo	-appat	-dima.
Igor. (Bon.)	isa-s nan isa,	chua-,	tolo-,	?	?
Mag.	ng̃agaisa	ng̃agadua kagadua[5]	ng̃agatelu	ng̃agapat	ng̃agalima

[1] These reduplicated forms are given only by Lozano.

[2] The form *tigsararo*, which is also given, seems to be a mistake for *tigsarosaro*.

[3] In most of the Philippine languages the combination of *n* + a dental becomes by assimilation *nn* and then by simplification of the doubling *n*, as here. [4] For the *h* cf. I, p. 337. [5] Cf. Juanmarti, *op. cit.*, p. 64.

In Tagalog the series with *tig* has the meaning of 'so many apiece,' and the reduplicated series, the meaning of 'so many at a time;' and the same difference in meaning is found between the forms with prefix *tag*, and those with prefix *tinag* in Cebuan; between the Bikol forms with prefixes *tig* and *man*, and those with suffixed *on*; and between the unreduplicated and reduplicated series in Pampangan. In the other languages the distributives have probably both meanings, certainly so in Hiliguayna and Pangasinan.

Some of the cardinals have a modified form after the various prefixes. Tagalog *tigalawa* and *tigatlo* are made on the basis of *lawa* (cf. above, p. 204) and *tlo*; the *a* of *tiga* is probably due to the analogy of *tigapat*. Bisayan *tagsa* is probably syncopated from *tagusa* or *tagisa*; it is unlikely that it is formed directly by prefixing *tag* to the root particle *sa*. Cebuan *tagudha*, *tagotlo* and *tagilma* are due to a metathesis of **tagduha*, **tagtolo*, and **taglima*. In Pampangan 'one' is represented by *tungal* or *tionan*; *tungal* is found also as prefix (cf. below, p. 241); *tionan* is perhaps derived from *ona*, the root of most of the ordinals for 'first,' being analyzed as **ti-ona-an*, *ti* being distributive prefix and *an* passive suffix. 'Three' is made on the base *tlo* as in Tagalog. In Pangasinan, 'two,' 'three,' and 'four' are made on the bases *dedua*, *tatlo*, *epat*; *dedua* is a reduplicated form, *e* representing an indistinct unaccented vowel; *tatlo* is the regular form of 'three' in many of the languages (cf. above, p. 205); *epat* is *pat* with *e*, probably equal to articular *i* (cf. above, p. 205). In Ilokan, *saggatlo* is probably derived from **sag-tatlo* by assimilation; *sagpapat* is probably for **sag-apapat* with reduplication like that of the numeral adverbs of 'four' and 'six' in Pampangan (cf. below, p. 246). In Magindanao the final *a* of the prefix *ngăga* and the initial *a* of *apat* coalesce, or the form is made on the basis *pat*.

All the forms of these distributives not here mentioned, together with those from 'six' upward, are made according to the following rules. Some additional examples of the numbers from 'six' upward will be given.

In Tagalog in the first series *tig* is prefixed to the cardinal, from 'five' upward, usually with reduplication of the first syllable of the cardinal, though sometimes without reduplication, except in the case of the powers of 'ten,' which take the prefix *man*. 'Ten' itself may take either *tig* or *man*, *tig* being

prefixed to the longer, *man* to the shorter form; numerals with prefixed *meyka* do not take this formation, e. g.:

tig-aanim 'six apiece.'
tig-sasangpowo } 'ten apiece.'
mamolo (man+polo)[1] }
tig-lalabi-ng isa 'eleven apiece.'
man-daan } 'a hundred apiece.'
manaan }
man-libo 'a thousand apiece.'

In the second series, if the cardinal is dissyllabic it is repeated entire; if it contains more than two syllables only the first two are repeated, e. g.,

animanim 'six at a time.'
sangposangpowo 'ten at a time.'
labilabi-ng isa 'eleven at a time.'

In Bisayan, at least in Cebuan, the distributive particle is simply prefixed to the cardinals, e. g.,

tag-unum 'six apiece.'
tag-pito 'seven apiece.'
tinag-unum 'six at a time.'
tinag-pito 'seven at a time.'

In Hiliguayna apparently the cardinal may be reduplicated as in 'one' and 'two.' In 'ten' the distributive particle may be prefixed to the root, e. g., Hil. *tagpolo*, or to the form with prefixed *na*, e. g., Sam.-Ley. *tagnapolo*. Hiliguayna also presents the forms *tag-usa-ka-polo* and *tag-sampolo*. In the powers of 'ten' the particle is prefixed to the root in Samaro-Leytean; in the other dialects forms are not available, e. g.:

tag-gatos 'one hundred at a time.'
tag-yokot 'one thousand at a time.'

In Bikol apparently *tig* or *man* are prefixed and *on* suffixed to the cardinal with the first two syllables reduplicated.

In Pampangan in the first series *tia* is prefixed to cardinals with initial consonant, *ti* to those with initial vowel, e. g.,

ti-anam 'six apiece.'
tia-pitu 'seven apiece.'

---

[1] In most of the Philippine languages the combination of *m*+a labial becomes by assimilation *mm*, and then *m* with simplification of the doubling, as here. **Mamowo* is apparently not formed.

In the second series up to 'ten' *ti* and *tia* are prefixed as above to the fully reduplicated cardinal; the teens may have reduplication or not; 'one hundred' is without reduplication; the powers of ten seem to have reduplication, e. g.:

ti-anamanam 'six at a time.'
tia-labilabi-n metong } 'eleven at a time.'
tia-labi-n metong }
tia-dinalan 'one hundred at a time.'
tia-libolibo 'one thousand at a time.'

The even tens seem to be formed by prefixing the distributive unit as a modifier to *polo*, e. g.,

tiduatidua-ng polo 'twenty at a time.'
tiawalowalo[1] -ng polo 'eighty at a time.'

The numerals with prefixed *meka* intermediate between the tens seem to be formed by reduplicating the syllable *ka*, and adding the suffix *an*, e. g.,

mekakatloan adua 'twenty-two at a time.'

In Pangasinan up to 'eight' inclusive, and from 'twenty' upward with the exception of the powers of 'ten' the distributives are formed by prefixing *san* to the cardinal, simple or with first syllable reduplicated; 'five,' 'seven,' and 'eight' have apparently only reduplicated forms, e. g.:

san-anem } 'six apiece, at a time.'
san-aanem }
san-pipito 'seven apiece, at a time.'
san-wawalo[2] 'eight apiece, at a time.'
san-derua-n polo } 'twenty apiece, at a time.'
san-derua-n polo }

'Nine' and the teens take the prefix *tag* with reduplication of the first syllable of the cardinal, e. g.,

tag-sisiam 'nine apiece, at a time.'
tag-lalabi-n sakey 'eleven apiece, at a time.'

In 'ten' and its powers *tongal* is prefixed to the root form, e. g.,

tongal-polo 'ten apiece, at a time.'
tongal-lasus 'one hundred apiece, at a time.'
tongal-libo 'one thousand apiece, at a time.'

---

[1] Written *tivalovalo*, probably a mistake.
[2] Written *sanooaolo*, evidently a mistake.

In Ilokan *sag* is apparently prefixed to the cardinal with first syllable reduplicated,[1] except in the case of 'ten' and its powers, in which *sag-tungal* is prefixed to the root form, e. g.:

sag-sisiam 'nine apiece.'
sag-tungal-polo 'ten apiece.'
sag-tungal-gasut 'one hundred apiece.'

In Ibanag in the first series *taggi* is apparently added to the simple cardinal.[2] The second series is formed only from those cardinals with initial consonant, this initial consonant being doubled after *ta* and the first syllable of the cardinal repeated, e. g.,

tappipitu 'seven at a time.'

In Nabaloi the complex *san-sis-kei* is prefixed to the cardinal, and in Bontok the cardinal is followed by the complex *-s nan isa* as in the case of the first five numerals. In Bontok instead of *s* the particle *is* seems to be used in some of the numerals, e. g.,

simpoo ya chuwa is nan isa 'twelve to each.'

In Nabaloi 'ten' has the fuller form, in Bontok sometimes the root, sometimes the fuller form, e. g.:

Nab. san-sis-kei-sam-pulo 'ten to each.'
Bon. poo-s nan isa 'ten to each.'
sim-poo ya isa-s nan isa 'eleven to each.'

In Magindanao, *ñgaga* or *kaga* (to judge from the form *kagadua*) are prefixed to the cardinal; the forms above 'five' are not given.

With regard to the formative elements of the distributives, *man* and *tungali* are clear, the explanation of the others is more uncertain. *Man* is the same prefix which is used with nouns in many of the languages to indicate 'so many apiece,' e. g., Tagalog *mamiso* (<*man*+*piso*) 'a peso to each.' *Tungal* is certainly connected with Tagalog *tungali*, which means to do something, one after another, e. g., *magtungali kayo-ng uminum* 'drink one after the other.'

The remaining elements are apparently made up of a number of smaller elements, the principal of which seem to be *ti*, *ag*, *sa*

---

[1] The sixth numeral, which is not given, is probably *sagnanam*, cf. *sagpapat*.

[2] The distributives of 'ten' and its powers are not given.

(Iban. *ta*, cf. I, p. 333), all of which may appear in a shorter form without vowel, viz., *t*, *g*, *s*.

Ti is found uncombined in Pampangan; the *a* of *tia* is probably derived from forms like *tiapat*, *tianam*, in which the root has initial *a*. *Ti*, *t* is probably also an element of Tagalog and Bikol *tig*, Bisayan and Pangasinan *tag*, Cebuan *tinag*, which are to be analyzed as *ti-g*, *t-ag*, and *t-in-ag*, combinations of *ti* with the formative element *ag*, and infix *in*.

The particle *sa*, *s* is found in Pangasinan *san*, Ilokan *sag*, Ibanag *taggi*, *ta*, Nabaloi *san-sis-kei*, Bontok *s* or *is nan isa*. Pangasinan and Nabaloi *san* is *sa* + ligature *n*; Ilokan *sag* and Ibanag *taggi* contain *ag*, and are to be analyzed thus: *sa-ag* or *s-ag* or *sa-g*; what the final *i* or *gi* of the Ibanag prefix is, is uncertain. Ibanag *ta* is either *sa* uncombined, or *sa* + *ag*, the doubling after the prefix representing the assimilation of *g*; Bontok *s* and *is* are perhaps reduced forms of *sa*; Nabaloi *sis* is perhaps a combination of these reduced forms. The *kei* of Nabaloi is the same as the *xei* of *saxei* 'one' (cf. I, p. 345); Bontok *nan isa* is probably a genitive of *isa* 'one.'

The particle *ag*, *g* occurs in *tig*, *tag*, *taggi* (Iban.), *sag* and perhaps *ta* (Iban.), which have already been discussed, and probably also in Magindanao *ñgaga*, *kaga*. These seem to be composed of *ag* or *g* preceded by a particle *ñga* or *ka*, and followed by an *a* which is perhaps borrowed from cardinals with initial *a* as in the case of *tia*.

The particle *sa* is without doubt the root particle of the numeral 'one,' the particle *ti* is perhaps identical with the root particle *ti* of the Ilokan article and Pampangan demonstrative *iti* (I. p, 353), used here with the meaning of 'one' like *sa*. The particle *ñga* of Magindanao is perhaps equivalent to the common ligature *ñga*, being likewise a demonstrative particle used in a numeral sense; *ka* is uncertain. The particle *ag* is perhaps to be connected with the particle *ag* of Harayan demonstrative *ag-to* and with the indefinite accusative signs *ug* and *ak* in Cebuan (I, pp. 345, 355); its function seems to be mainly connective. The suffix *on* in Bikol and the infix *in* in Cebuan are doubtless the same as the identical verbal particles.

These particles *sa*, *ti* and *nga*, if this analysis is correct, give the idea of 'for each one,' 'apiece,' 'at once' to the cardinal numeral to which they are prefixed.

A special series of ordinal distributives is usually not formed. Tagalog, however, has such a series formed from the ordinals by full reduplication, e. g.,

ikaikalawa 'every two, every second.'
ikaikatlo 'every three, every third.'

Adverbs.

The numeral adverbs are of two kinds, viz., cardinal and ordinal. Cardinal adverbs answer the question 'how many times?' Ordinal adverbs answer the question 'which time in a series?' A special series of ordinal adverbs has been developed in only a few cases.

The cardinal adverbs are formed from the cardinals by prefixes sometimes accompanied by reduplication. The chief prefixes are, viz.:

Tag., Bis., Bik., Pamp., Mag., Sulu,	maka
Pang., Ilok.	mamin, mami
Iban.	mi, min
Igor. (Nab.)	pin
Igor. (Bon.)	mami(n), manga

These particles are in many cases varied like verbal particles to express tense. In Tagalog *maka* is the usual particle, but *naka* may be used to indicate past time. In Bisayan and Bikol, *naka* is the usual particle, but *maka* is used of the future. In Pampangan, *meka*, in Pangasinan, *amin*, *ami*, and in Ilokan, *namin*, *nami* are the forms for past time. Tagalog *minsan* has also the form *ninsan* for the preterite.

Reduplication is found in older Tagalog and in Pampangan. The forms of the first five numerals are, viz.:

	1	2	3	4	5
Tag.	minsan	makalawa	makaitlo, makatatlo	makaipat, makaapat	makalima, makalilima
Bis. (Ceb).	nakausa	nakaduha	nakatolo	nakaupat	nakalima
Bik.	nakasaro	nakadua	nakatolo	?	?
Pamp.	misan	makaladua	makatatlo	makapapat	makalilima
	tolo-misan	tolo-kaladua	tolo-katatlo	?	?
Pang.	maminsan	mamidua	mamitlo	mamipat	maminlima
Ilok.	maminsan	mamindua	mamitlo	maminpat	maminlima
Iban.	mittan	mirua, middua	millu	mippat	milima
Igor. (Nab.)	pinsak	pinchua	pintaddo	pinappat	pindima
Igor. (Bon.)	mamingsan	mamiddua	mamitlo	mangipat	mangalima
Mag.	makaisa	makadua	?	?	?
Sulu	makamisan	makarua	makato	?	?

The first of the series is made regularly by prefixing the adverbial particle to the cardinal in Cebuan, Bikol, and Magindanao; Nabaloi *sak* in *pinsak* seems also to be a shortened form of the cardinal *saxei* (<*sakei*). The other forms are based on the root particle *sa*, which takes everywhere the verbal suffix *an*, the *a* of which coalesces with the *a* of the particle, and a verbal prefix in the forms *mi*, *min*, *ming*. In addition Pampangan, Pangasinan, and Bontok have the prefix *ma*, probably the adjectival prefix, and Sulu has the regular adverbial prefix *maka*; Pampangan may take the additional prefix *tolo*. Ibanag *mittan* stands either for **mi-ta-an* <**mi-sa-an* with phonetic doubling, or for **min-ta-an* *<*min-sa-an* with assimilation of *n* to *t*.

The other numerals are made with the adverbial prefixes. In Pangasinan 'two,' 'three,' and 'four,' and in Ilokan 'three' are made with *mami*, the others with *mamin*. In Bontok *mami* occurs in 'three'; *mamiddua* represents **mamin-dua* with assimilation; the prefix of 'four' and 'five' is *manga*, the final *a* being elided before the initial vowel of 'four.' In Ibanag, *mi* is apparently the prefix in all the forms except *middua* <**min-dua*; *min* is perhaps also to be assumed in *mippat* (cf. below). In Pampangan, *tolo* may be substituted for the *ma* of the prefix *maka*.

In some cases the form of the cardinal has been changed. In Tagalog 'two' is made on the basis *lawa* like the ordinal, and 'three' and 'four,' besides the regular forms, have forms made on the bases *itlo*, *ipat*; *ipat* is *pat* with articular *i* as in the Bontok cardinal; the *i* of *itlo* is probably borrowed from *ipat*. In Pampangan the bases are all reduplicated, the vowel of the reduplication in 'two' and 'three' being *a*; *ladua* is probably for **dadua*; *makapapat* probably stands for **maka-apapat*. In Pangasinan and Ilokan, 'three' is made on the base *tlo*, and 'four' apparently on the base *pat*. Ibanag *millu* and *mippat* are probably made on the same bases, *millu* being derived by assimilation from **mi-tlo*, and *mippat* standing either for **mi-pat* with phonetic doubling, or for **min-pat* with assimilation. Bontok 'three' is made on the base *tlo*, 'four' apparently on a base *ipat*.

All the forms of these adverbs not here mentioned, together with those from six upward, are made according to the follow-

ing rules. Some additional examples of the numerals from 'six' upward will be given.

In Tagalog from 'five' upward *maka* is prefixed to the cardinal, simple or reduplicated, the prefix *sang* of 'ten' and its powers being regularly omitted in the reduplicated forms, and sometimes in the forms without reduplication,[1] e. g.,

maka-sangpowo } 'ten times.'
maka-popowo }
maka-labi-ng isa } 'eleven times.'
maka-lalabi-ng isa }
maka-sang libo } 'a thousand times.'
maka-libo }

In Bisayan and Bikol *naka* is prefixed to the cardinal. In Samaro-Leytean 'ten' stands either with or without the prefix *na*, to judge from the forms, *naka-polo* 'ten times,' *naka-napolo kag usa* 'eleven times.' In Bikol the higher cardinals seem to be reduplicated, to judge from *naka-riribo* 'thousand times.' In Bikol the ordinals may also be used as adverbs.

In Pampangan, *maka* is prefixed to the cardinal, which has its first syllable reduplicated when it begins with a consonant, as in 'five;' but when the cardinal begins with a vowel, as in 'four' and 'six,' the consonant following that vowel is prefixed to the cardinal; this is likewise due to reduplication, the vowel and following consonant of the cardinal being repeated, and the initial *a* of this reduplicated form coalescing with the *a* of *maka*; 'ten' has the root form; 'hundred' preserves the infix *in*, e. g.:

makananam 'six times.'
maka-pipito 'seven times.'
maka-popolo 'ten times.'
maka-dirinalan 'a hundred times.'

In numbers intermediate between the even tens, etc., the adverbial particle is prefixed to forms made by addition, e. g.,

maka-tatlo-ng polo ampon adua '32 times.'
maka-dirinalan ampon mekapat pito '137 times.'
maka-lilima-ng dalan ampon mekatlo-n siam '529 times.'

---

[1] In Tagalog an additional series of adverbs meaning 'so many days ago' is formed by prefixing *ka* to the *maka* forms, e. g.,

kamakalawa 'day before yesterday.'
kamakatlo (*irregular*) 'three days ago.'

In Pangasinan, *mamin* is prefixed to the cardinal except in 'six,' which is irregular; 'ten' and its powers having the root form, e. g.,

mamin-pito 'seven times.'
mamin-polo 'ten times.'
mamin-lasus 'one hundred times.'

'Six' is *maminem*, and is probably derived from **maminanem* or **mamininem* (cf. the bases *ipat*, *epat*, in Tagalog, Bontok and Pangasinan) by haplology as in the Ilokan form.

In Ilokan, *mamin* is prefixed to the cardinal as in 'five,'[1] 'ten' having the root form, e. g.,

mamin-ennem 'six times.'
mamin-polo 'ten times.'

'Six' is also *maminnem* for **mamininnem*, one of the syllables *in* having been dropped, or lost by haplology.

In Ibanag, *mi* is said to be prefixed to the cardinal, but no examples above 'five' are given.

In Nabaloi, *pin* is prefixed to the cardinals, 'ten' and its powers having the root form, and the teens being expressed by *sawal* + the unit without connective, e. g.,

pin-pulo 'ten times.'
pin-sawal saxei 'eleven times.'
pin-dasus 'one hundred times.'

In Bontok up to 'ten' inclusive *manga* is prefixed to the cardinal, the final *a* coalescing with the initial *a* of 'six'; and 'ten' having the root form,[1] e. g.,

manganim 'six times.'
manga-pito 'seven times.'
manga-poo 'ten times.'

Above 'ten' in general the unit that stands at the beginning of the compound cardinal takes the form given above, the rest of the numeral remaining unchanged,[2] e. g.,

mangapoo ya chuwa 'twelve times.'
mamiddua poo 'twenty times.'

---

[1] 'Nine' times is given as *mang-nin-siam*, but this is probably simply a mistake, cf. *manga-siam ay poo* 'ninety times.'

[2] There seems to be a great deal of freedom in the use of the ligature; it may be omitted, or *ay* may be used after a vowel.

mangalima ay poo 'fifty times.'

mangipat[1] ay lasot ya isa 'four hundred and one times.'

The hundredth of the series is made by prefixing *manga* to *poo ay poo*[2] 'ten tens' instead of to *lasot*. The thousandth is *kalasolasot* or *kalifolifo*, the reduplication emphasizing the largeness of the number.

The meaning of the various formative elements of these numeral adverbs is not clear, but they all seem to be verbal particles, *pin* and *an* being passive, the others active. This is indicated by the fact that they are varied to express tense. The forms containing a prefix *ka* may be derived from the ordinals. The close relation between the ordinals and these adverbs is shown by the fact that the two classes are identical in Bontok, and that the Bikol ordinals may be used as adverbs. The prefix *maka*, however, may be the active causative prefix, the adverbs formed with it signifying 'causing, making two, three,' etc.

In Pangasinan and Ibanag special series of ordinal adverbs have been developed, viz.:

	Pang.	*Iban.*	
1	kasia	pamittan	
2	pidua	pamirua	pirua, piddua
3	pitlo	pamillu	pillu
4	pipat	pamippat[3]	pippat[3]
5	pinlima	pamilima[3]	pilima[3]
6	pinen (*sic*)	etc	etc
7	pinpito		
	etc.		

In Pangasinan from 'eleven' to 'nineteen' instead of the forms with prefixed *pin*, the *ka* ordinals or *mika* forms made on the basis of *dua-n polo*, may be used, e.g.,

kalabi-n lima 'the fifteenth time.'

mikadua-m[4] polo-y[5] sakey 'the eleventh time.'

---

[1] Written *mangapat*, probably a mistake, cf. *mangipat ay lasot* 'four hundred times.'

[2] Written *poo ya poo*, 'ten and ten,' evidently a mistake.

[3] Not given, but formed according to the rule given by De Cuevas, p. 203.

[4] Assimilated from *n*.

[5] Ligature used instead of a form of the article, as frequently elsewhere.

In Ilokan the ordinals themselves are used as adverbs.[1]

The analysis of *kasia* is not entirely clear; it may be ordinal prefix *ka* + *sia*, identical with the *sia* of Samaro-Leytean *siapa*, *siahan pa* 'first,' and ultimately with the pronoun of the third person singular in many of the languages.

The other forms are simply modifications of the cardinal adverbs. The Pangasinan forms are made by dropping the prefix *ma* of the cardinal adverb and changing the *m* of *mi* to *p*. In *pinen*, if it is correct, the final *m* of **pinem* has been assimilated to the preceding *n*. The Ibanag forms are made by prefixing *pa* to the cardinal adverb, or by changing the *m* of its prefix *mi* to *p*. These forms have, at least formally, passive prefixes with initial *p* like the Nabaloi cardinal adverbs, while the other cardinal adverbs have active prefixes.

Restrictives.

Restrictive numerals are those in which the meaning of the original numeral is restricted by the added idea of 'only.' They are usually derived from other numerals by reduplication. They occur in Tagalog, Pampangan, Pangasinan, Ibanag, and probably in other languages.

In Tagalog this restrictive meaning is given by reduplicating the first syllable of a numeral, cardinal, distributive, or adverb, e. g.,

iisa 'one only.'
titigisa 'only one apiece.'
miminsan 'only once.'
dadalawa 'only two.'
sasangdaan 'only a hundred.'

The restrictive meaning is still further enhanced by combining full with partial reduplication, e. g.,

iisaisa 'only one.'
dadaladalawa 'only two.'
miminsanminsan 'only once.'

In Pangasinan this restrictive meaning is given to cardinals by repeating the first syllable of the numeral including the consonant after the first vowel, e. g.,

[1] Cf. Williams, *op. cit.*, p. 71.

saksakey 'one only.'
taltalo 'three only.
samsampolo 'ten only.'

This formation is made also from the ordinals in this language, e. g.,

kadkadua 'the one that alone makes the second of a series.'

The reduplicated distributives seem to have, at least occasionally, a restrictive meaning,[1] e. g.,

sandererua 'no more than two by two, no more than two apiece.'

In Ibanag restrictive forms are made from the cardinals from 'two' to 'nine' by reduplicating the first syllable.[2]

In Pampangan besides the forms consisting of numeral + adverb 'only,' which are found in general in all the languages, the numeral or part of it may be repeated, the two forms being joined by the ligature, and a modifying adverb usually accompanying the complex,[3] e. g.,

metong mo-ng metong 'only one.'
apat mo-ng apat 'only four.'
mekatlo la-n mekatlo-n lima 'only twenty-five.'

Restrictives may also be formed from the cardinals by prefixing *ka* and suffixing *an* to the reduplicated cardinal,[4] e. g.,

kamemetungan } 'one only.'
kamemetungmetungan }
kalilimaliman 'five only.'

In Ilokan a series of restrictives are made from the adverbs by changing the *m* of the prefix *min* to *p* and inserting an additional *min* between this prefix and *ma*. This is really a species of the reduplication, the prefix *min* appearing first in the active and then in the passive form, e. g.:

---

[1] Cf. Pellicer, p. 132.

[2] No examples are given by De Cuevas.

[3] This construction is similar to the use in Tagalog of *na-ng* (the adverb *na* + ligature) between two identical words for the sake of emphasis, e. g.,

tawo na-ng tawo 'nothing but people.'
sumulat na-ng sumulat 'to write and write.'

[4] These forms are similar to the Tagalog superlative forms like *katamistam-isan* 'sweetest' from *tam-is* 'sweet.'

maminpinsan 'only once.'
maminpindua 'only twice,'
maminpitlo 'only three times.'
maminpinpat 'only four times.'
maminpinnem[1] 'only six times.'
maminpinpolo 'only ten times.'

Addenda and corrigenda to Part I:

p. 340—Samaro-Leytean genitive *nan* is used only in such expressions as *ngã nan Padre* 'says the priest.'

p. 350—In Samaro-Leytean the oblique of the demonstratives may also apparently be preceded by the genitive of the definite article, e. g., *san sadto*; *sa sadto* and *sa sito*, though not given, are practically certain.

p. 358—Samaro-Leytean genitive of the personal interrogative is written *nino*, without glottal catch; Pampangan *kanino* is given as 'supletivo' i. e., oblique, but has been placed in the genitive following the analogy of the other languages.

p. 359—Samaro-Leytean individualizing interrogative is *haen*.

p. 365—Samaro-Leytean *si ako* is not given by Figueroa, but is practically certain.

p. 366—Pampangan *kekatam* is evidently a mistake for *kekatamo*; there being room for another letter between it and the following word in the badly printed copy of Bergaño that was used.

p. 374—Samaro-Leytean *si ikao*, though not given, is practically certain; the Bikol plural forms, which are not given by San Agustín, are taken from Herrejon, *Lecciones de gramática bicol-hispana*, Binondo, 1882.

p. 379—Samaro-Leytean has *kanira* 3. pl. corresponding to *kaniya*; both forms are given by Figueroa as genitive, but have been placed in the oblique following the analogy of the other languages.

In Nabaloi the form *niai* 'of this' is given by Sheerer in the text, p. 128.

The personal pronouns of Bontok Igorot, which were not given in Part I, may be added here, in so far as they are known.

	1*st*	2*nd*	3*rd*
sing.	sakin, ak	sika ; ka	sia, sitodi
pl.	chatako, tako	chakayyo, kayo	chaicha, cha
	chakami, kami		chatodi

Genitive forms of the first person singular and plural are *-k* and *ta* respectively.

Ak, *sika*, *ka*, *sia*, *kami*, *kayo*, *-k* and *ta* are to be explained as the identical forms in the other languages. *Sakin* is perhaps *akin* (= Tag. *akin*) with articular *s* (<*si*). *Sitodi* is *si* (=Tag. *si*) + *to* (Tag. dem. root

---

[1] Made on the basis of *maminnem*.

part. *to*) + *di* (?). In the plural *cha* is a phonetic modification of *da* as in Nabaloi (cf. p. 333). *Tako* is doubtless inclusive, *kami* exclusive. *Tako* is a combination of *ta* (root part. 1 pers.) + *ko* (perhaps a modified form of *ka*, root part. of 2 pers.), cf. Tag. *tayo*, Pamp. *tamo*, p. 370. *Chatako*, *chakami*, and *chakayo* are like the Ilok. *datayo*, *dakami*, *dakayo* (pp. 372, 378). *Chaicha* and *chatodi* are similar forms made on the basis of *icha* (= Ilok. *ida*), and *todi* of singular.

The following pronouns of Samal, Manobo, Tagakaolo, Bilan, and Atas, languages spoken by pagan tribes in Mindanao, are given in the vocabularies in Montano, *Rapport à M. le ministre de l'instruction publique sur une Mission aux Îles Philippines et en Malasie* (Archives des Missions scientifiques, série 13, tome xi, Paris, 1885).

	Sam.	*Man.*	*Tagak.*	*Bil.*	*Atas*
def. art.	yan	yan	ang	ni	ang
dem. sg.	ini	iani	ini	ani	ini
dem. pl.	inian	ninian	inian	anian	inian
1 sg.	aco	siacon	aco	agu	siccao
2 sg.	icao	icuna	icao	gufa	siap
3 sg.	iaan	ian	iaan	sanito	sia
1 pl.	kita kami	si kami	karaygan	guictodoon	sikami
2 pl.	kamu	si kamu (*written* kaum)	kamu	?	sikiu
3 pl.	silan	si kandan	kamuyan	guoya	sikandan

In the demonstratives, *ani* and *iani* are probably to be analyzed as *a-ni* and *i-a-ni*, *ni* being root particle, and *a* and *i* articular particles. The plural seems to be indicated by a suffix *an*; *ninian* is perhaps a mistake. In the first person singular *k* has apparently become *g* in Bilan, Manobo *acon* is probably the same as Bisayan *akon*; Atas *siccao* and *siap* (probably a mistake for *siak*) seem to have been interchanged by the author. In the third singular *iaan*, *ian* are probably combinations of the root particle *ya* and suffix *an*. The forms Manobo *icuna*, *sikandan* and Atas *sikiu*, *sikandan* are to be compared with the Bagobo forms; Samal *silan*, with Magindanao *silan*. The forms Tagakaolo *karaygan*, *kamuyan*, and Bilan *gufa*, *sanito*, *guictodoon*, and *guaya* are not clear; *sanito* and *guictodoon* probably contain the root particle *to*: *kamuyan* and *guoya*, the root particle *ya*. The remaining forms require no comment.

Al-Ḥasan ibn Ibrāhīm ibn Zūlāḳ.—By RICHARD GOTTHEIL, Professor in Columbia University, New York City.

Al-Ḥasan ibn Ibrāhīm ibn Zūlāḳ—or, with his full name, Abū Muḥammad al-Ḥasan ibn Ibrāhīm ibn al-Ḥusain ibn al-Ḥasan ibn 'Alī ibn Khuld ibn Rashīd ibn 'Abd Allāh ibn Sulaimān ibn Zūlāḳ—is considered to be one of the best authorities for the early history of the Fatimides. Of his personal history we seem to know nothing other than that he was descended from an enfranchised slave, affiliated to the tribe al-Laith.[1] His immediate relatives, however, were scholars. His great-grandfather, al-Ḥasan ibn 'Alī, was already known as a learned man. Abû Muḥammad's son, Abū al-Ḥusain (died 415 A.H.), continued the historical work of his father; and this work was further continued by Abū al-Ḥusain's son, Ibn Abī Ḥusain.[2] Al-Siyūṭī mentions a Muḥammad ibn Zūlāḳ who was the teacher of Abū Bakr Muḥammad ibn Aḥmad al-Kinānī[3] (born 264 A.H., died 345 A.H.). Whether he was any relative of al-Ḥasan ibn Ibrāhīm, I do not know. The dates preclude the possibility of his having been a son. Our Ibn Zūlāḳ was born in 306 A.H., according to a combination of Ibn Khallikān, based upon a statement of Ibn Zūlāḳ himself.[4] He died at an advanced age in 387 A.H.[5]

Of the various historical treatises written by Ibn Zūlāḳ, only one seems to have come down to us, his life of Muḥammad ibn Mūsa ibn 'Abd al-'Azīz al-Kindī al-Ṣairafī (died 358 A.H.).[6] His *Sīrat Muḥammad ibn Tughj* the Ikhshīd is mentioned by

[1] That he was a pupil of al-Kindī would seem to follow from the expression *shaikhuna*, on fol. 2a of Paris Ms. Arabe 1818, quoted below.

[2] Becker, *Beiträge zur Geschichte Ägyptens unter dem Islam*, i, p. 14 gives the details.

[3] *Ḥusn al-Muḥāḍara* (Cairo 1320) i, p. 141, 2.

[4] Tr. de Slane, i, p. 388.

[5] Al-Siyūṭī in his *History of the Chaliphs* says that "Ibn Zūlāḳ al-Miṣrī" died in 422—evidently a mistake. See tr. by H. S. Jarrett, Calcutta 1881, p. 435.

[6] Ms. in the Khedivial library. See the *Catalogue* of that library vol. v, p. 6. Part of his name is given there as *ibn Khalf ibn Rāshid.*

Ibn Sa'īd and by al-Maḳrīzī; his *Sīrat Mu'izz li-Dīn Allāh* by al-Maḳrīzī alone; his *Sīrat al-Mādharāiyyīn* also by al-Maḳrīzī. His continuation of al-Ḳindī's *Umarā' Miṣr*[1] went down to the year 302 A.D., that of al-Ḳindī's *Ḳuḍāt Miṣr* to the year 386 A.H.[2] It is probable that a great part of the material which the historian collected in these works has passed over into those of later writers, and his own name been suppressed. His additions to the *Ḳuḍāt Miṣr* seem, however, to have had a longer separate existence. They were used by Ibn Ḥajar al-'Asḳalānī (773–852 A.H.) for his *Raf' al-Iṣr* or biographical lexicon of Egyptian Cadis. In his preface to this work (Ms. Bibl. Nat. Paris, Arabe No. 2149) he gives his sources as follows: اعتمدت فى الاول على اخبار القضاة لابى عمر الكندىّ. ثمّ على ذيله لصاحبه ابى محمّد بن زولاق. ثمّ على كتاب ابن ميَسّر. ثمّ على اخبار مصر لشيخ شيوخنا الحافظ قطب الدين الحلبىّ وهو فى نحو عشرين مجلّدة بيض منه المحمّدين فى اربعة. واستفدت كثيرا من ذلك من تاريخ رفيقى الامام الاوحد المطّلع تقىّ الدين ابى محمّد احمد بن علىّ بن محمّد القادر التيمى. وقد جمع شيخنا العلّامة ذو التصانيف الواسعة سراج الدين بن الملقّن شيئًا من ذلك وقفت عليه فلم يشف لى غليلا ما انبأنا الحافظ ابو الحسن علىّ بن بكر بن سليمان مشافهة عن ابى عمر بن ابى عبد الله بن ابى اسحاق الكتانىّ.

In his account of Ibn Zūlāḳ, Ibn Khallikān says that the additions to al-Kindī's *Ḳuḍāt Miṣr* commenced with the life of Bakkār ibn Ḳutaiba (ca. 246 A.H.);[3] and in the *Raf' al-Iṣr* of

---

[1] Seemingly mentioned only in Ibn Sa'īd, al-Maḳrīzī and Ms. Brit. Mus. No. 1212.

[2] Unfortunately, the Ms. of al-Kindī's *Ḳuḍāt Miṣr* in the Brit. Mus. (No. 1212) contains the continuation by Abū al-Ḥasan Aḥmad ibn 'Abd al-Raḥmān ibn Burd, and not that of Ibn Zūlāḳ.

[3] *Ḥusn*, i, p. 218; Ḥājī Khalīfa, i, p. 188; ii, pp. 102, 141; iv, p. 561.

Ibn Ḥajar,[1] Ibn Zūlāḳ is mentioned several times by name in the life of Bakkār. The same is the case in the life of Muḥammad ibn al-Nu'mān, with whom Ibn Khallikān says the additions ended.[2]

The greatest uncertainty, however, seems to exist in regard to Ibn Zūlāḳ's supposed historical and topographical works. Of such an historical work as Becker ascribes to him we know little.[3] Ibn Khallikān says simply, "he composed an excellent work" on history; and does not mention any of the minor works cited above. Ḥājī Khalīfa seems to think that this was a continuation of the two histories of Ibn Yūnus 'Abd al-Raḥmān ibn Aḥmad al-Ṣadafī.[4] If this is so, and if al-Ṣadafī carried down his work approximately to a time near his death (347 A.H.), it is possible that the *Sīrat Muḥammad ibn Tughj* and the *Sīrat Mu'izz* were part and parcel of this *Dhail.* In this case, it would be wrong to count them as individual productions of Ibn Zūlāḳ. In the introduction to his *Ḥusn al-Muḥāḍara*, al-Siyūṭī speaks of Ibn Zūlāḳ's *Ta'rīkh Miṣr* as one of his authorities; but in his chapter on the historians who lived in Egypt, he seems to know only of his *Faḍā'il Miṣr* and of his additions to the *Ḳuḍāt Miṣr* of al-Kindī.[5] One of the

---

[1] Ms. Paris, Arabe 2149, fols. 27b, 29a, etc. Al-Kindī is also mentioned. The passage, however, is not in the London Ms. of the *Ḳuḍāt Miṣr*. Ibn Ḥajar refers to al-Ṭaḥāwī (*Ṭabaḳāt al-Ḥuffāẓ* xii, 25), as Ibn Khallikān states—probably on the authority of Ibn Zūlāḳ.

[2] JAOS. xxvii, p. 247, 13.

[3] The only distinct reference to it that I can find is in Ibn Ḥajar's *Raf' al-Isr* (Ms. Paris 2149), fol. 93b, where he says: وذكر ابن زولاق في تاريخه الذي على سنين في حوادث سنة عشرين فتحت مصر في اوّل المحرّم منها وولّى عمر عمرو بن العاص جريتها وخراجها الخ. According to this testimony, the work was arranged in chronological sequence; yet, in view of the paucity of further testimony we must suppose that it was not in frequent use or that it formed a part of his Khiṭṭa.

[4] Ibn Khallikān, ii, p. 95; Ḥājī Khalīfa, ii, 148, with corrections vi, p. 657. Al-Subkī, *Ṭabakāt al-Shāfi'iyya al-Kubra*, i, p. 279. On a supposed *Futūḥ Miṣr* of Ibn Zūlāḳ, see de Sacy, *Chrest. Arabe*, ii, p. 150; Weil, *Gesch. d. Chalifen*, v, p. xiii.

[5] i, p. 265.

titles of the *Khiṭṭa* is *Ta'rīkh Miṣr wa-Faḍā'iliha*; and al-Siyūti is evidently speaking of one and the same work in both places.[1]

The view suggested here is in a small measure supported also by Ibn Sa'īd; though he adds an additional difficulty to the problem. Ibn Sa'īd has taken most of his material dealing with Muḥammad ibn Tughj from Ibn Zūlāḳ's *Sīra*.[2] But he expressly states that the *Sīra* was nothing but an addition to the *Umarā' Miṣr* of al-Kindī. Accordingly, the *Sīra* was no independant work, but a *Dhail*, though not to the history of al-Ṣadafī. There is no evidence I know of which will solve this second question as between al-Kindī and al-Ṣadafī; but there seems little doubt that the *Sīra* was nothing more than an addition to some previous work. Parts of larger works were often designated with the title *Kitāb*. In Ms. Bibl. Nat. Paris, Arabe 1818, Ibn Zūlāḳ himself states that he had written a separate *Kitāb* on the river Nile;[3] but in all probability, this is nothing more than the various chapters dealing with that subject that are or were to be found in his *Khiṭṭa*.

This name "Khiṭṭa" is given to his topographical work on Egypt by Ibn Khallikān; and, following him, by Abū al-Fidā'.[4]

Among the Arabic manuscripts in the Bibliothèque Nationale and in the library of Gotha, there are certain works purporting to be by Ibn Zūlāḳ, and entitled either *Kitāb Faḍā'il Miṣr wa-Akhbāriha wa-Khawāṣṣiha* or *Ta'rīkh Miṣr wa-Faḍā'iliha*. Ibn Khallikān says of the *Khiṭṭa* that Ibn Zūlāḳ treated his subject in this work "fully." It will be seen from the examination of these manuscripts, that they can in no way represent the *Khiṭṭa*, as the material they contain is practically worthless; and of the subjects treated only a cursory view is given. At most, they give us an extract of the larger work; probably only of a part of it—a panegyric of the country.

---

[1] What Ibn Khallikān (i, p. 201) means by the "Lesser History" of Ibn Zūlāḳ I do not know.

[2] Tallquist, *Ibn Sa'īd*, Leyden 1899, tr. p. 12. The same is true of the history of the family al-Mādarā'ī (p. 118; cf. *Khiṭaṭ* ii, 155-157.)

[3] See below. According to Vollers (ZDMG., vol. xliii, p. 104) at the end of the Cairo Ms. of Ibn Zūlāḳ's life of al-Ṣairafī there are some extracts from the *Faḍā'il Miṣr*.

[4] *Annales Moslemici* ii, p. 599. Ḥājī Khalīfa from Ibn Khallikān, ii p. 148; he adds that al-Maḳrīzī does not mention the work.

It was the habit of Muhammadan historians to open their history of the country with which they were dealing with a description of its *Faḍā'il* or excellencies.[1] Very often, special treatises upon such "excellencies" were composed, which later historians incorporated with their opening chapters. To mention only a few: *Faḍā'il Baṣra* by Omar ibn Shabba Abū Zaid al-Numairī (died 262 A.H.); *Faḍā'il Baghdād* by Abū al-'Abbās Aḥmad ibn Muḥammad al-Sarakhsī (died 286 A.H.); *Faḍā'il Bait al-Muḳaddas* by Ḥamza ibn Aḥmad al-Ḥusainī al-Dimishḳī (died 874 A.H.); *Faḍā'il al-Ḥarām* by Ibn 'Asākir (died 600 A.H.); *Faḍā'il al-Sha'm* by Abū al-Ḥasan 'Alī ibn Muḥammad Raba'ī (ca. 435 A.H.); *Faḍā'il Gharnāṭa* by Muḥammad ibn Ibrāhīm al-Gharnaṭī.

The first to write such a treatise on the *Faḍā'il* of Egypt seems to have been Omar ibn Muḥammad ibn Yūsuf ibn Ya'ḳūb al-Kindī; though Ibn 'Abd al-Ḥakam prefaced his history of the Conquest of Egypt by the Mohammedans with material of the same kind.[2] Following al-Kindī, and very evidently on similar lines, Ibn Zūlāḳ wrote his own account, which he included in his *Khiṭṭa*, and later edited in an abridged form. It may be useful to give a short account of the subjects treated by al-Kindī, in order to compare his work with that of Ibn Zūlāḳ. After citing verses from the Koran dealing with Egypt, the derivation of the name Miṣr from a supposed son of Noah, and the part played by a Copt in building the Ka'ba at Mecca, he cites the prominent men of pre-Islamic times who were born in Egypt: Alexander the Great, Hermes, Hippocrates, Plato, Aristotle, Ptolemæus, Theon, Philo, Archimedes. Then came the "Companions," the legal lights, the holy men, the poets and the caliphs born there. The "excellencies" of Egypt are mentioned, especially in comparison with those of other Islamic lands. Of the eighty cities in Egypt, he mentions the principal ones, e. g., Sa'īd, Alexandria and its lighthouse, Fayyūm Memphis, 'Ain Shams and Faramā; describes the poll-tax (*kharāj*) in pre-Islamic and Islamic times; the story of the

[1] Ḥājī Khalīfa iv, pp. 447 et seq.

[2] Information kindly given by Professor Torrey. Al-Kindī's text has been published, with a Danish translation, by J. Oestrup in *Oversigt over det Kongelige Danske Vindenskabernes Selskabs forhandlinger*, Copenhagen 1896, No. 4.

Muḳauḳis, the wonderful things (*'ajā'ib*) to be found there; the Nile; the Muḳaṭṭam hills; the burial places; the pyramids; the peculiar fish eaten there; the various stuffs manufactured; the Egyptian horse; the mines, field products, animals, trees and the commerce of the country.

In the Catalogue of the Arabic Manuscripts belonging to the Bibliothèque Nationale in Paris,[1] Nos. 1816, 1817 and 1818 are attributed to Ibn Zūlāḳ; though the editors seem to have some doubt in regard to Nos. 1816 and 1818. But it is in regard to 1817 that such an ascription is manifestly impossible. On fol. 3a Abū Ṣalt ibn Umayya al-Andalusī[2] is cited, who died in the year 529; and on fol. 2b al-Maḳrīzī![3] The name of Ibn Zūlāḳ is mentioned neither in the body of the book nor in the preface; though the title gives it as the complete work of the author[4]—and in this Brockelmann has naturally followed the copyist's lead.[5] The first seven folios give us a general account of Egypt, its peculiarities and its wonders:

a. The greatness of Egypt and the many blessings showered upon it by God;[6] traditions of Ka'b al-Aḥbār. fol. 1a.
b. The boundaries of Egypt. fol. 3a.
c. Account of the excellencies of Egypt; the prophets born there; the prominent men that came to Egypt; the "companions" and "followers" buried there; the advantages

---

[1] p. 330.

[2] The work referred to is probably his *al-Risāla al-Miṣriyya*, cited by Ḥājī Khalīfa ii, p. 148; Wüstenfeld, *Geschichtsschreiber*, p. 80. Cf. Yāḳūt, iv, pp. 551, 865; al-Siyūṭī, *Ḥusn* ii, pp. 196, 229; Ibn Abī 'Usaibia, ii, 106.

[3] هكذا ذكر المقريزى فى كتابه المسمّى بالخطط وقال ابو الحسن المسعودىّ.

[4] هذا تاريخ مصر وفضائلها لابن زولاق على التمام.

[5] *Gesch. der arab. Lit.* i, p. 149.

[6] وقال صلعم قسمة البركة عشرة اجزاء جعل الله منها تسعة اجزاء فى مصر وجزءا واحدا فى سائر الارض—a quotation that occurs in all Muhammadan histories of Egypt (e. g., *Ḥusn*. i, p. 10; ii, p. 199), and which reminds one of the Talmudic saying "Ten measures of beauty descended upon the world: Jerusalem took nine, and the rest of the world one" (*Ḳiddūshīm* 49b; *Esther Rabbah*, i).

(*maḥāsin*) of Egypt; the wonderful things (*'ajā'ib*) to be found there; the good things to eat, e. g., water-melons, lemons. fol. 4a.

d. Further account of the excellencies of the country—especially of the green stone used in building the Ka'ba and which came from Egypt. fol. 5a.[1]

e. Each month has its own food and perfume.[2] fol. 6b.

f. The first rulers in Egypt. fol. 7a.

It seems probable that these opening pages have caused the imputation, by some ignorant scribe or some willful deceiver, of this work to Ibn Zūlāḳ; for exactly the same sort of introduction is to be found in the Paris Mss. 1819 and 1820. These two are ascribed to Ibrāhīm ibn Wāṣif Shāh, who lived towards the end of the seventh century A.H. According to Ḥājī Khalīfa,[3] Ibn Wāṣif Shāh wrote a history of Egypt, which he himself shortened into a compendium with the long title: *Kitāb Jawāhir al-Buḥūr wa-Waḳā'i' al-Umūr wa-'Ajā'ib al-Duhūr wa-Akhbār al-Diyār al-Miṣriyya*; and not two separate works as Wüstenfeld believed.[4] The description given by Ḥājī Khalīfa suffices to prove this. The value placed upon this work of Ibn Wāṣif Shāh may be seen from the fact that a number of Mss. of the history have come down to us, and from the use made of it by later writers, e. g., al-Maḳrīzī, Abū al-Maḥāsin,[5] al-Ḳalḳashandī,[6] Ibn Iyās,[7] Sambari.[8] But the Paris

---

[1] ومن فضائل مصر انّ الرخامة الخضراء التى فى الحجر عند الكعبة من مصر. Cf. *al-Khiṭaṭ*, i, p. 28, below.

[2] وفى مصر كلّ شهر يوجد نوع من المأكول والشموم. Cf. *al-Khiṭaṭ*, ibid.

[3] ii, pp. 150, 641.

[4] *Geschichtsschreiber*, p. 151.

[5] i, p. 40.

[6] *Ṣubḥ al-A'shā*, Cairo 1903, i, p. 222; Wüstenfeld, Calcaschandi's *Geographie und Verwaltung von Ägypten*, pp. 20, 47.

[7] Ta'rīkh Miṣr, i, pp. 17, 23, 24.

[8] In the Ms. of his Chronicle dealing with the history of the Jews in Egypt, Library of the Alliance Israelite Universelle. Wüstenfeld in *Orient und Occident*, i, p. 326, calls attention to the fact that some passages cited in other works as coming from Ibn Wāṣif Shāh can not be found in the Mss. See, also, the opening chapters of such late works as Muḥammad ibn 'Abd al-Mu'ṭī's *Kitāb akhbār al-uwal fī man taṣarrafa fī Miṣr*, Cairo 1311 A.H. and 'Abdallāh ibn Ḥijāzī al-Shaḳāwī's *Tuḥfat al-Nāẓirīn*, etc., on the margin of the preceding (cf. Brockelmann, *Gesch.* ii, p. 296, 480).

Mss. 1819 and 1820 can hardly contain this work; not simply because Ibn Wāṣif Shāh is mentioned in the third person[1]—a point made by the compilers of the Catalogue. This was no uncommon procedure with Arabic authors. There are more cogent reasons. The Mss. themselves carry the history of Egypt down to the time of the Turkish Conquest in 923 A.H.; the same is true of the Gotha Ms., and authorities cited lead us well beyond the middle of the eighth century A.H. In addition to 'Abd al-Ḥakam,[2] al-Ḳindī,[3] al-Ḳuḍā'i, al-Musabbiḥī[4] and al-Mas'ūdī, there appear al-Dhahabī (died 748 A.H.) and Ibn al-Kathīr (died 774). In fact, al-Dhahabī seems to be the principal authority upon whom the author relies. As Ibn Wāṣif Shāh is often cited by al-Maḳrīzī (845 A.H.), he must have lived before his time; in fact, al-Maḳrīzī uses him largely in connection with the fabulous period of Egyptian history.[5]

But, whether or no Mss. 1819 and 1820 are the work of Ibrāhīm ibn Wāṣif Shāh, Ms. 1817 agrees with them to a remarkable degree. In fact, Mss. 1817 and 1819 go back to one and the same original manuscript; while 1820 is a copy of an original that had a slightly longer text than the original of 1817 and 1819, particularly in the quotations. It is, therefore, certain that Ms. 1817 can not contain the *Faḍā'il* of Ibn Zūlāḳ.

If we now turn to a consideration of Mss. 1816 and 1818, we shall see that the first work mentioned by Brockelmann in his list of Ibn Zūlāḳ's works, *Kurze Geschichte Ägyptens bis zum Jahre 49/669* in Ms. 1617, 1 of the Gotha collection, is in all probability the same as our Ms. Paris 1818. Becker has already pointed out[6] that the two commence in the same manner; I

---

[1] Ms. 1819, fol. 41: Ms. 1820, fol. 55a.

[2] Ms. 1820, fol. 30b.

[3] Ibid. fols. 23a, 31b, 33a, 53a.

[4] Ibid. fols. 30b, 57b (=Ms. 1819, fol. 42b).

[5] See A. Guest, in JRAS. 1902, p. 120. More than half of the *Abrégé des Merveilles* translated by Baron Carra de Vaux (Paris 1898) deals with the legendary history of Egypt. Passages cited from it by Maḳrīzī are attributed to Ibn Wāṣif Shāh (p. xxxi), though Carra de Vaux does not believe that he is the author. Of Ibn Wāṣif Shāh as an historian we know next to nothing (*Lit. Central-Blatt*, 1898, col. 1138); it has been suggested even that there are two writers of that name (*Orient. Lit. Zeit.* i. p. 147).

[6] *L.c.* p. 13.

imagine that Gotha 1617, 1 and 1617, 2 are both comprised in Paris 1818—a fact which of course is not apparent from the scanty description given in the French catalogue.

It will be useful to give a short description of the contents of Ms. 1818. Prefixed to the whole work is an introduction that reads as follows: كتاب مختصر فضائل مصر تصنيف الشيخ الاجلّ الامام الحسن ابن ابراهيم بن زولاق رحمه الله تعالى ورضى عنه. وفيه ذكر الاسكندريّة وصفتها وعجائبها وذكر وقعة الاسكندر مع القيصرى وغير ذلك. وفيه ايضا المسائل التى سئل عنها الامام الشافعىّ رضى الله عنه واجوبتها. وفيه الاربعون حديثا الموسومة بالطيب الطيبات اختمت بها الكتاب. وصلّى الله على سيّدنا محمّد وعلى آله وصحبته وسلّم.

This introduction itself raises some questions. I can not find in the manuscript any account of al-Shāfi'ī. Nor does it end with the forty traditions called طيب الطيبات. One is forced to the conclusion that the introduction is misplaced and does not belong here. It would be a long introduction for ten pages; for that which follows is no single work. The first ten pages form a separate treatise and open with the words: قال الحسن بن ابراهيم كانت مصر دار كفر والاسكندريّة ومنف والصعيد واسفل الارض الى الموضع المعروف بالشجرتين والحصن المعروف بقصر الشمع. وكان جميع ذلك فى يد هرقل عظيم الروم يتولّاه المقوقس القبطىّ واسمه مينا بن قرقب اليونانىّ ويخلفه [?] صاحب قصر الشمع المذكور المعروف بالاسمرج[1] ثمّ بعث الله عزّ وجلّ رسوله محمّدا صلّى الله عليه وسلم فاقام بمكّة ثلاثة عشر سنة وهاجر الى المدينة فاقام بها عشرا.

[1] Evidently a variant for the usual الاعيرج (Yāḳūt, iii, 894, 14; al-Maḳrīzī i, 289, 14; 290, 22) or الاغيرح (Abū al-Mahāsin, i, 8, 3). Karabacek in *Mittheil. Papyrus Rainer* i, 2; Butler, *Arab. Conquest of Egypt*, p. 513.

وكاتب رسول الله صلّى الله عليه وسلم المقوقس ودعاه الى الاسلام. وكان الرسول اليه عبادة بن الصامت. فاجاب رسول الله صلّى الله عليه وسلم عن كتابه واهدى اليه من قباطى مصر وطوائفها وعسلا وفرسا وبغلة وحمارا وبلغه انّ رسول الله صلّى الله عليه وسلم لا يجمع بين اختين. فاهدى اليه اختين شقيقتين مارية وسيرين وكانتا من احسن اختين بمصر. فلمّا دخلتا عليه قال رسول الله صلعم اللهمّ اختر لنبيّك فبادرت مارية بالاسلام فاصطفاها لنفسه واختلف فى اختها. فروى شيخنا ابو عمر محمد بن يوسف الكندىّ انّ رسول الله صلّى الله عليه وسلم وهبها لجهم العبدىّ فولدت له زكريآء بن الجهم وهو صاحب الدار فى زقاق القناديل. They give a general account of the letters and communications that passed between the early rulers of Islām and their viceroys in Egypt, ending with the death of Mu'āwiya in 680. On fol. 10b, a new Basmalah introduces a second treatise—this time on the *Faḍā'il*—with the following superscription to the thirty-five folios; قال الحسن بن ابراهيم هذا كتاب جمعت فيه جملا من عيون اخبار مصر وفضائلها وصفتها اختصرته من كتابى الكبير فى تاريخ مصر واخبارها.

The sections of this second treatise are as follows:

a. Verses from the Koran dealing with Egypt. fol. 10b.

b. ذكر دعاء الانبياء لمصر. Benedictions of the prophets on Egypt. fol. 13a.

c. وصف العلماء بمصر ودعائهم لها. What the learned men have to say about the excellencies and blessings of Egypt. fol. 13a.

d. ذكر من ولد بمصر من الانبياء. The prophets born in Egypt. fol. 14b.

e. The wise men in Egypt, e. g., Aristotle, Galen, Ptolemaeus. fol. 15a.

f. ذكر من ملك مصر منذ الطوفان الى . . . الاسلام. Account of thirty-five rulers that reigned in Egypt from the Flood to the time of Islām. fol. 17b.

g. ذكر ما فى مصر من ثغور الرباط والمساجد الشريفة وما فيها من شركة الحرمين وسائر الدنيا. Account of the frontier garrisons, mosques and connections with Mecca, Medina, etc. (mere lists). fol. 19b.

h. ذكر صفة مصر وخيرها وذكر المامون لها. Description of Egypt, the good things to be found there and that of which the country is free. Contains, also, a list of the khalījs in Egypt. fol. 21b.

i. ذكر كور مصر وما فى كلّ كورة من اصناف الخ. The various cities of Egypt; the cloths, fruit, food and drink peculiar to each one. fol. 22b.

j. A short account of the City of Alexandria and its lighthouse; letter of ʿAmr ibn al-ʿĀṣī in regard to it. fol. 24a (cf., also, fol. 30a).

k. وبمصر من العجائب. On the wonderful things to be seen in Egypt. fol. 27b.

l. ذكر النيل وامورها باختصار. A short account of the Nile, in which the author mentions the fact that he had written a special treatise on this subject. fol. 31a, commencing: فامّا النيل وعظم شأنه ومنافعه فقد عملت فى ذلك كتابا وقد انتشر والذى اذكر هنا فى هذا الكتاب الخ.

m. On the Nilometer (mentioning the year 247 A.H.). fol. 30b.

n. ذكر صفة مصر وتمثيلها. A further general account of Egypt. fol. 33b.

o. On the poll-tax of Egypt. fol. 37a.

p. ذكر مصر وفضائلها. Another chapter on the excellencies of Egypt. fol. 41a.

q. ذكر ما تختصّ به مصر دون غيرها من الملبوس والمركوب والمأكول والمشروب. On the clothes, shoes, food and drink peculiar to Egypt. fol. 42a.

r. ومن خواصّ مصر. On the flora of Egypt, e. g., الخوخ الزهرىّ القمح اليوسفىّ. fol. 43a.

s. Egypt is more desirable than Baṣra and Kūfa. fol. 44b.

As far as I can see, there is nothing in these folios, 10b–44b, that would militate against ascribing them to Ibn Zūlāḳ. If we can trust the heading, they represent a compendium of his larger history of Egypt; or, at least, of a part of it.

In considering Paris Ms. Arabe 1816, it must be noticed in the first place that though it contains less actual matter than Ms. 1818, it treats of more subjects. Ms. 1818 has 45 folios of 21 lines to the page; i. e., about 3780 lines in all. Ms. 1816 has 49 folios of 15 lines to the page; i. e., about 1470 lines in all—less than half the number of words in Ms. 1818. The differences in the subject matter may be seen from the following table of its contents:

a. Verses on Egypt in the Koran. fol. 1b.

b. ذكر دعاء الانبياء لمصر. Benedictions of the prophets on Egypt. fol. 3b.

c. وامّا دعاء نوح. Benedictions of Noah on Egypt. fol. 4b.

d. ذكر وصف العلماء لمصر ودعائهم لها. What the learned men have to say about the excellencies and the blessings of Egypt. fol. 5a.

e. ذكر من ولد بمصر من الانبياء. The prophets born in Egypt. fol. 7a.

f. ذكر من كان بها من الحكماء. The wise men who were in Egypt. fol. 7a.

g. وبمصر الطلسمات العشرة وبادى الاسكندرانىّ صاحب الزنج. وبمصر من العلوم التى عمرت بها علم الطبّ اليونانىّ. On the ten talismans and sciences cultivated in Egypt. fol. 8b.

h. ذكر من ملك مصر منذ الطوفان. On the rulers of Egypt from the Flood. fol. 9b.

i. ومن فضائلها انّ الذى بنى الكعبة رجل من قبط مصر. The builder of the Ka'ba in Mekka was a Copt. fol. 15b.

j. وامّا ما فيه من ثغور الرباط. Account of the frontier garrisons. fol. 15b.

k. ذكر صفة مصر وخيرها. On the good things in Egypt; on the Khalīj. fol. 15b.

l. ذكر مصر وترتيبها. On the good arrangement of things in Egypt. fol. 18a.

m. On the plants of Egypt. fol. 20b.

n. وكان عمرو بن العاصى يحضّ الناس فى طوبه على الخروج الى الربيع ويخطب بذلك فى كلّ سنة وهذه الخطبة. On certain ameliorations introduced by ʻAmr ibn al-ʻĀṣi. fol. 21a.

o. وامّا خراج مصر ومقاديرها. On the poll-tax of Egypt. fol. 25a.

p. ذكر مصر وفضائلها ومقطها. Further account of the excellencies of Egypt. fol. 30a.

q. باب يذكر فيه الموازية بين مصر وبغداد. A comparison of Egypt and Bagdad—especially in regard to climate, dress, fruits, etc. fol. 32b.

r. نبذة من اخبار ملوك مصر الكفّار. On the pre-Islamic rulers of Egypt. fol. 37a.

s. فى مدح مصر ونيلها. On the praise accorded to Egypt, and especially to the Nile. fol. 39b.

t. ذكر قسمة نوح الارض بين اولاده. How Noah divided the earth between his sons. fol. 41b.

u. ذكر فضل مصر وبركتها وكثرة خيرها ومعادن رزقها وطيب عيشها ورخص سعيرها وغير ذلك من عجائبها. On the excellencies and the blessings of Egypt, the plenteousness of its provisions, the cheapness of living, etc. (contains also a short poem). fol. 43b.

v. وقيل انّ مصر فوضة مكّة والمدينة. Egypt the granary of Mecca and Medina. fol. 44b.

w. ولمصر ثمنون كورة. On the eighty cities of Egypt. fol. 45a.

x. A poem in Rejez verse on the governors of Egypt entitled *al-'Uḳūd al-durriyya fī-l-Umarā' al-Miṣriyya* by Jamāl al-Dīn al-Miṣrī al-Jazzār. fol. 45b–49a.

This last piece shows quite conclusively that the whole of Ms. 1816 can not be by the hand of Ibn Zūlāḳ. Jamāl al-Dīn abū al-Ḥasan ibn 'Abd al-Aẓīm ibn al-Jazzār lived from 601 A.H. to 669 A.H.; and his versified treatise counted up the rulers of Egypt from 'Amr ibn al-'Āṣī down to al-Malik al-Ẓāhir Baibars (died 676 A.H.)[1] A comparison of the table of contents of Ms. 1816 with that of 1818 seems to prove that some later compiler has taken about one-half of the material found in the *Faḍā'il* of Ibn Zūlāḳ, and has combined this with some other notices in order to form a new work. Who this compiler was we do not know.

These descriptions of the early history of Egypt and of the wonderful things to be seen there continued to be recited by all those who treated of Egypt. Who was their original compiler we do not know. As mentioned above, they are in large part already put down in Ibn 'Abd al-Ḥakam's work, and in al-Mas'ūdī's *Murūj al-Dhahab.*[2] But, later writers are wont to mention as one of their special authorities our Ibn Zūlāḳ; evidently all the quotations coming from the *Faḍā'il.* Yāḳūt has the following references:[3] *Mu'jam al-Buldān* i, 168, 21 on Udfu; 260, 6 on Alexandria (قال الحسن بن ابراهيم); 269, 19 on Uswān; 272, 17 on Asyūṭ; 264, 8 on the lighthouse of Alexandria; 760, 4 on Buṣīr; ii, 603, 8 on Dimyāṭ; iii, 74, 23 on the Khalīj Sardūs; 660 on al-Arīsh (*Faḍā'il* mentioned); 762, 23 on 'Ain Shams; 935, 14 (زَوْلَق!) on the Fayyūm; iv, 517, 3 on Mariūṭ; 668, 8 on Memphis; 965, 3 on the Pyramids (twice). Al-Ḳazwīnī, *Āthār al-Bilād*, ed. Wüstenfeld ii, 149 (ما ذكر الحسن بن ابرهيم المصرىّ) cites him in connection with 'Ain Shams; p. 177 (وقال ابن زولاق) on the Pyramids; 182 on Memphis=Yāḳūt iv, 668, 8; the passage following in

[1] Brockelmann, *Geschichte*, i, p. 335. The whole poem is given by al-Siyūṭī, *Ḥusn*, ii, pp. 41 et seq.

[2] *Les Prairies d'Or*, ii, pp. 356 et seq.

[3] Nearly all cited in Heer, *Die historischen und geographischen Quellen in Jāqūt's Geographischem Wörterbuch*, Strassburg 1898, p. 42.

Yāḳūt is given by al-Ḳazwīnī as also coming from Ibn Zūlāḳ. Abū Ṣāliḥ, the historian of the churches in Egypt, ed. Evetts, tr. p. 283, mentions him in connection with a wonderful palm-tree in Barhāwa—though the form of the name, al-Naṣr ibn Zūlāḳ, is evidently a mistake.[1] From some *Faḍā'il Miṣr*, however, Abū Ṣāliḥ has gleaned a goodly amount of material which has been scattered throughout his work, e.g. on the revenues of Egypt, pp. 15, 80; on certain wonders in Egypt, p. 43; "Certain matters concerning Egypt," p. 57; distinguished men of Egypt, p. 58; fish, trees, stuffs, horses, mules, gold-mines, clay, paper, also on the Nile, pp. 67, 93; on the Sojourners in Egypt, p. 68; on Nebuchadnezzar and Belshazzar, p. 83; sayings of Muhammad in regard to the Copts, p. 97; on Hermes, p. 153; on the old kings at Memphis, p. 199; description of the Fayyūm, p. 202.[2]

Al-Maḳrīzī has, naturally, gathered together a great many traditions regarding the early history of Egypt, its excellencies and its advantages; not only in the opening chapters, but scattered throughout his voluminous work. As is usual, he has drawn very extensively upon all the authors accessible to him, copying many passages word for word, and not always citing the author from whom he had drawn his material.[3] For the *Faḍā'il*, *'Ajā'ib* and *Maḥāsin*, he seems to have relied largely upon Ibn Wāṣif Shāh; but he mentions a number of other authorities, e. g., Ibn 'Abd al-Ḥakam, al-Kindī, Mas'ūdī, al-Ḳuḍā'ī, al-Jāḥiẓ, etc. Ibn Zūlāḳ's name does not occur once in this connection, though he mentions other works of our author. Many passages, it is true, read as if they came from Ibn Zūlāḳ's *Faḍā'il;* but as the other works upon this subject are not accessible, it is difficult to accuse al-Maḳrīzī of citing him anonymously.

---

[1] See Introduction, p. xviii.

[2] Abū al-Faḍl Ja'far ibn Tha'lab al-Adfuwī (685–743 A. H.) in his *al-Ṭāli' al-Sa'īd*, dealing chiefly with the city of Ḳūṣ in the Ṣa'īd and the learned men of that place, mentions Ibn Zūlāḳ—the quotation coming evidently from his *Faḍā'il*: وذكر ابن زولاق انّه ليس نوع من انواع الثمرة بالعراق الّا وفى صعيد قوص مثله. (Ms. Bibl. Nat. Arabe 2148, fol. 7a.) He is one of the chief authorities of al-Maḳrīzī for Upper Egypt (*al-Khiṭaṭ* i, 189).

[3] Brockelmann, *Die arabischen Handschriften zu Breslau*, pp. 19, 20.

A further question arises in connection with later writers upon Egypt who mention Ibn Zūlāḳ. Have they the citations at first or at second hand? In the present state of our knowledge, it is impossible to answer the question.[1] Abū al-Maḥāsin cites Ibn Zūlāḳ in three places, i, pp. 47, 48, 50; all three evidently from the *Faḍā'il.* From al-Ḳindī and others he has the following dealing with the same subject: passages from the Koran on Egypt, i, p. 28; traditions of Muhammad concerning Egypt, p. 30; the Nile, p. 35; the extent of Egypt, p. 38; its excellencies, p. 39; the ancient history of the country, p. 44; wonderful things and buildings, p. 45; advantages of Egypt, p. 47; comparison between Baghdād and Egypt, p. 48; ancient revenues, p. 49; the "Companions" and the Biblical personages who were there, p. 55; poems laudatory of Egypt, p. 55; the khalījs, p. 59; Kings of Egypt (from Mas'ūdī), p. 51.[2]

The few citations of Ibn Zūlāḳ in al-Siyūṭī's *Ḥusn al-Muḥāḍara* give me the impression that they are at first hand. He mentions him in his preface as one of his sources, and cites him as an historian of the country (i, 265). He quotes him, i, p. 29 (twice), on the pre-Islamic wise men of Egypt; ii, p. 196, on the Maidān (وحكى ابن زولاق فى كتابه); i, p. 2, on the passages in the Koran which refer to Egypt; p. 4, on the same subject; p. 9, on the traditions in regard to Egypt; p. 13, on the names of certain cities and again upon the poll-tax; p. 26, on Daniel in Egypt (evidently at first hand). Al-Siyūṭī, of course, collected much other material dealing with the subject. It is to be found

---

[1] I have found two quotations from Ibn Zūlāḳ in al-Subkī's *Ṭabaḳāt al-Shāfi'iyya al-Kubra*, ii, pp. 118, 324—both evidently from his *dhail* to al-Kindī's history of the Cadis of Egypt.

[2] In a work on the Ḳarāfa cemetery, just outside of Cairo, and the prominent men buried there, *al-Kawākib al-sayyāra fī tartīb al-ziyāra*, the author Muḥammad ibn al-Zayyāt (804 A. H.) mentions Ibn Zūlāḳ as one of those who had already written upon the subject. This refers to the *Faḍā'il*—as may be seen from the heading of the first chapter: فى فضل مصر واهلها ونيلها وجندها وما ورد فيها من الآيات الشريفة والاحاديث النفيسة, and of the second: فى عجائبها (Gotha Ms. Nos. 56, 1532). A similar Ms. seems to be in Leipzig. See Pertsch, *Arab. Hss. der Herz. Bibl. zu Gotha*, i, p. 106; iii, 159. Brockelmann, *Gesch. der arab. Lit.* ii. 131, mentions a copy in the Khedivial Library, but omits the others.

in the opening chapters of his work, in the chapter on the *laṭā'if* of Egypt (ii, p. 192) and that on the Nile (ii, p. 200). His authorities, besides Ibn Zūlāḳ, are especially Ibn 'Abd al-Ḥakam, al-Ḳindī, Ibn 'Asākir, Muḥammad ibn Ka'b al-Ḳurṭubī, al-Jauzī, al-Jāḥiẓ, Ibn Faḍl Allāh, al-Jīzī, al-Ṭaifāshī, the *Mubāhij al-Fikar*,[1] *Gharā'ib al-'Ajā'ib*, *Mir'āt al-Zamān*. In one place he cites quite generally: *ba'du man ṣanafa fī faḍā'ili miṣra* (ii, 193).

Ibn Iyās, in his *Ta'rīkh Miṣr*, mentions the death of Ibn Zūlāḳ in the year 387 A.H. (i, p. 55); but he does not cite him as an authority, though he opens his history with an account of the *Maḥāsin* and *'Ajā'ib* of the country (pp. 5–8); adds verses laudatory of it (p. 8) and closes with the pre-Islamic history (pp. 9–19). His chief authorities seem to be Ibn 'Abd al-Ḥakam, Ibn Wāṣif Shāh, Mas'ūdī, al-Ḳuḍā'ī and Sa'īd al-Ghauthī, though probably all at second or third hand. The knowledge of these ancient authors had died out; their works had either perished or had been carried off by the conqueror; and in truth one of the most modern authorities on the later history of Egypt, 'Abd al-Raḥmān ibn Ḥasan al-Jabartī, complains that al-Maḳrīzī mentions works which he (the author) has never seen. Among such he cites the histories of al-Musabbiḥī, Ibn Zūlāḳ and al-Ḳuḍā'ī.[2]

---

[1] By Muḥammad ibn Ibrāhīm al-Waṭwāṭ, Brockelmann, *Gesch.* ii, p. 55.

[2] A similar work treating of the "excellencies" of Egypt must be the *al-Faḍā'il al-bāhira fī maḥāsin miṣr wal-Ḳāhira*—of which Mss. are found in Gotha, in the India Office, the British Museum, and in the collection of the Asiatic Society of Bengal (see their *Catalogue*, Calcutta 1899, p. 56, Ms. No. 43). The description given by Rieu in his *Supplement to the Catalogue of the British Museum*, p. 354, shows that it covers exactly the ground of the works preceding it. The Mss. give the author's name as Ibn Ẓāhir; but Wüstenfeld (p. 225) and Brockelmann (*Gesch.* ii, 182) give Muḥammad Abū Ḥāmid al-Ḳuḍā'ī al-Shāfi'ī (820–888 A.H.). He was a pupil both of Ibn Ḥajar and of al-Maḳrīzī.

The English-Rommany Jargon of the American Roads—By J. Dyneley Prince, Professor in Columbia University, New York.

The work of preparing the following paper, which is the result of twenty years of more or less intermittent personal study of the English gypseys on the American roads, chiefly in New Jersey, has been very largely a labor of piety. The late Charles Godfrey Leland, who was the most trustworthy authority on the English gypsey jargon and with whom in his declining years the present writer was most pleasantly associated, expressed the desire that a systematic etymological English-Rommany vocabulary should be prepared, to facilitate the further study of this highly interesting linguistic survival. In Mr. Leland's own works on this subject[1] there is little attempt to classify according to probable derivation. In the *Romano Lavo-lil*[2] of the late George Borrow, furthermore, the material given is of small philological value, unless the student has already some knowledge of Rommany. Borrow, for example, did not scruple, in many instances, to change his Rommany to fit his own theories and was in no sense a safe scientific guide. It should be added that his specimens of Rommany (pp. 96ff.) seem frequently to be rather his own composition than the real utterances of gypseys. I need only call attention to the absurd catch-word (p. 108): *weshenjuggalslomomengreskeytemskeytudlogueri*, which can hardly be said to have emanated from a gypsey brain. Borrow seems to have meant by this monstrosity, although he does not translate it: "a milkmaid (*tudlogueri*) of the fox-hunters' country." Furthermore, Borrow's ignorance of the old gypsey gen. pl. ending *-engro* should be noted, which he regarded (p. 31) as a separate word meaning

[1] The English Gypsies and their Language, London, 1876. Anglo-Rommany Ballads, London, 1878. Remarks on the origin of the Gypsies and their Language, Proc. Or. Congress at Florence, 1878. Origin of the Gypsies, Saturday Review (London), 1879. The Gypsies, Boston, 1886.

[2] *Romano Lavo-lil* by George Borrow (reprint), Putnam, New York, 1905.

"fellow." He also showed his unacquaintance with the inflections of the older dialect, all of which are excellently well preserved in the Continental Rommany, by supposing that the gen. sing. ending *-eskro* was a suffix of Wallachian origin (p. 31).

The English Rommany, as it is spoken to-day by the vast majority of the English gypseys on the American roads, is, from the grammatical point of view, little more than a broken jargon based grammatically on English. Thus, only the following remnants of the older inflection are still in general use: the gen. sing. *-eskro*, now only in adjectives, as *fōkéskro* 'vulgar' from *fōki* 'people'; the gen pl. *-engro*, used to-day only in derivatives, as *yāgéngro* 'a gun,' from *yāg* 'fire.' In C.,[1] derivative nouns of this character are formed by means of the gen. sing., as *mačeskro* 'fisherman,' from *mačo* 'fish.'

The plural is formed usually by Eng. *-s*, as *rĭvvabens* 'clothes,' but occasionally by *-yor* as *bāl-yor* 'hairs.' This *-yor* is probably a relic of the C. nom. pl. fem. *-a*, and *-a* also applied to abstract derivatives, as C. *tatypena*, pl. of *tatypen* 'heat, fever.'

The abstract *-ben* is still in very common use in the Eng. Rom., as *tāttoben* 'heat,' from *tātto* 'hot.'[2]

The numerals are ordinarily only used up to ten, although there are old people who can count to one hundred in Rommany.

The adjectival and nominal endings *-o* and *-i* for masc. and fem. respectively are still used, although the fem, *-i* is beginning to give way to the masc. *-o*. The comparative degree is still expressed by the ending *-deer*, as *kūshto-deer* 'better' and the superlative by *-deero*, as *tāttodeero* 'hottest,' although these endings are frequently replaced by the Eng. *-er*, *-est*.

---

[1] The following abbreviations have been used in this article: Ar.= Arabic. C=Continental Rommany as given by Ješina, *Románi Čīb*, Leipzig, 1886; and in *Die Sprache der transylvanischen Zigeuner*, Wlislocki, 1884. Gk.=Greek. H.=Hindu. Mag.=Magyar. P.=Persian. Skr.=Sanskrit. Sl.=Slavonic. T.=Turkish.

[2] I have followed generally the system of pronunciation given by Leland, as this is in use to-day among such few Rommanys as write their idiom: viz., *a* as *o* in *spot*; *ā* as *a* in *father*; *ai*, *au* and *ay* as in English; *ĕ* as *e* in *met*; *ee* as in English; *ĭ* as *i* in *pin*; *i* as *i* in *machine*; *o* as *au* in *taught*; *ō* as *o* in *more*; *ŏ* as *o* in *spot*; *u* as *oo* in *foot*; *ū* as *oo* in *fool*; *y* as the vowel *y* in English. The consonants are to be pronounced as in English. In the Slavic and Continental words herein cited the Bohemian system of orthography is followed.

With the exceptions of a very few old people who occasionally use the 1 p. *-āva*, 2 p. *-es*, 3 p. *-ĕla*, pl. *-ān*, *-ĕn*, all verb-forms are lost and the verbal roots are inflected like English. Thus, instead of *jĭnâva* 'I know,' we find always *māndi jĭns*, i. e., the accus. pronoun with the Eng. 3 p. The writer has heard a very old woman say *yov jĭnĕla* 'he knows,' but these older forms are incomprehensible to the average Rom.

The pronouns are *māndi* 'I, me'; *tūte* 'thou, you'; *yov* 'he' (only nom.); *yoi* 'she' (only nom.); *lester* 'he' and 'him'; *lāki*, *lātti* 'she, her'; *mĕnde* 'we' and 'us'; *mĕndūee* (dual) 'we two'; *lĕnde* 'they' and 'them.' I have never heard *tūménde* 'you' (pl.), but have no doubt that it still may be remembered.

On the other hand, in spite of this grammatical poverty, the vocabulary is surprisingly rich and well preserves the Hindu original, as may be seen from a study of the following glossary of 672 root-words. Of these, 148 are pure Rommany derivatives, compounds and synonyms, 56 are of uncertain derivation and 468 seem to show a reasonably sure origin. Out of these 468, 310 seem to be of pure Hindu origin, 33 are Persian, 32 Mod. Greek, 34 are Slavonic, 3 are Magyar, 11 are English, 6 are apparently German, 8 are Osmanli-Turkish, 4 Italian, one seems to be French, 21 are hybrids (Eng. and Romm.), 4 are Yiddish, and one is probably Wallachian. The marvellous tenacity of the original Hindu and Persian elements is thus admirably exemplified. Although the Indian origin of Rommany has of course been well known since the days of Pott,[1] it is still a source of surprise to the student to find in this perhaps most broken of all the Rommany idioms save one[2] so extensive a survival of the basic material.[3] The presence of Greek and Slavonic elements is, of course, most natural, if we remember

[1] Pott, *Die Zigeuner in Europa und Asien*, Halle, 1844 ff. Note also Paspati's exhaustive treatise on the Greek Rommany in JAOS. vii, pp. 141–220.

[2] The sole exception is the Skandinavian Rommany jargon. See Ellert Sundt, *Beretning om Fante-eller Landstrygerfolket*, Christiania, 1842.

[3] In the following glossary my comparison of Rommany words with modern Hindu forms simply indicates a connection in root, and does not in any case imply my belief that Rommany is derived from any modern Hindu idiom.

the wanderings of these people across Europe. It should be noted that the Slavonic equivalents herein cited have been taken chiefly from the Slovák dialect, with which the writer is somewhat acquainted. The few Magyar, German, Italian and other non-English loanwords were, of course, brought into England from the Continent, but the very slight Yiddish admixture was most probably picked up in and about London. It is also strange and a striking testimony to the conservative character of the English gypseys that they have resolutely rejected slang of every character (thieves' cant, tramps' jargon, etc.). These people have often expressed to me the feeling that their speech is a *language* and their one common heritage. In fact, nothing can irritate a gypsey more than to accuse him of using cant, which indeed has borrowed from Rommany, as *stir*, from *stariben* 'prison,' but never conversely.

The following table of phonetic changes which have occurred in this Eng.-Romm. dialect will be of interest to the philologist:

Rommany

ch=Hin. *z*; *chong* 'knee'=*zānū*.
ch=Hin. *j*; *chōvihánee* 'witch'=*jādūgārnī*.
ch=Hin. *th*; *chunger* 'spit'=*thūk* 'spittle.'
ch=Mag. *d*; *chūmba* 'hill'=*domb*.
k=Hin. *gh*; *kair* 'house'=*ghar*.
r=Hin. *z* (rhotacism); *rāt* 'blood'=*zāt*.
sh=Hin. *ch*; *shālee* 'rice'=*chāṅwal*.
sh=Hin. *s*; *shūn* 'hear'=*sun-nā*.
sh=Hin. *j*; *shūnalo* 'angry'—*jalānā* 'kindle, make jealous.'
s=Hin. *d*; *sūv* 'swim'=*dubānā* 'be immersed.'

Finally, the Hindu *j* in *rājā* 'king' has been palatalized in the Rom. *ry*, *rya* 'gentleman, lord.'

The American Rommanys speak very rapidly in a pleasant monotone, slurring over the English words and accentuating their own material as much as possible. They preserve, in fact, a sort of philological freemasonry, always testing the stranger with a few fixed shibboleths, such as *kan* 'sun,' *chūree* 'knife' and, most especially with that puzzling compound, *hŏchewĭchee* =the Eng. hedgehog. Only last autumn an aged Rommany man said to me after a long conversation, and this must suffice as a specimen of the dialect:

Rya, muk māndi pūcher tūte chŭmanis. If you can pĕn māndi sosse a hŏchewĭchee, I'll pen tūte's a tācho Rŏm='Sir, let me ask you something. If you can tell me what a *hŏchewĭchee* is, I'll say that you are a genuine Rommany.'

The language is still very much alive, as the small children may be heard prattling in it constantly, and it will probably continue to live in its present form as long as the law permits these wanderers to camp on the highways.

The following glossary, containing, it is hoped, practically all the words in common use, is given in order to facilitate the labors of some better qualified scholar than myself in rescuing from the memories of the older gypseys more valuable material for the comparative study of this Aryan Oriental dialect, which has refused to die even among the American fields and hedges.

Rommany Glossary.

Adósta 'enough'; see *dosta*=Sl. *dost'* 'enough.'

Adói 'there'; prob. same element as Zend *avadha* 'here.' Note that C. *adaj*='here.'

Adóvo 'that'; same element as in *adói*. See *dovo*.

Adrée 'in, within, into.' See *dree*=C. *andro* 'in'=H. *andar* 'in, within.'

Aglál 'before'=C. *anglal*. Contains same element as H. *āge*; *agal* 'before.'

Ajáw 'again, already'=Eng. *a*+*jaw* 'go'; lit. 'agoing'='again'; probably paronomasia (?).

Akónyo 'alone'=H. *akelā* (?)='solitary.'

Akóvo 'this.' See *kovo*. This=C. *gaba* and *akkava* 'here'; *akkova* 'there, that one.' These words are prob. H. Cf. Pott, 257.

Aký 'here'= *akowo* (*akovo*); *akoi*; *akāi* (?).

Aláy 'down, below'=H. *tale*. Cf. *talley*.

Angústro 'finger-ring'=P. *angushtarī*. See *gushto* 'finger' and *wongashee* 'ring.'

Ānkáir 'begin'; prob. Germ. analogy *ān*+*kair*=*anfangen* 'begin.'

Ānpáuli 'back' (adv.). Same element as *ān*+*pauli*, q. v.

Apópli 'back' (adv.). Seems to contain a reduplication of Gk. πάλιν=*pauli*, q. v.

Aprée 'upon, on'=C. *upré*, *pro*=H. *upar*.

Archich 'lead' (metal). Uncertain derivation.

Atrásh 'afraid.' See *trash.* This=Eng. *a+trash.*

Atát 'across, against.' Der. uncertain.

Av 'come' (only imperative). See *hav.* This=C. *avav* 'I come'=H. *ā-nā.*

Ávali 'yes.' Longer form of *ávo.* The ending *-ali* appears also in *bábali*, q. v.

Ávo 'yes'=C. *uva*=H. *haṅ, huṅ* 'yes.'

Avrée 'out, out of'=C. *avrí.* Prob. H. See JAOS. vii. 207 =Skr. *bahir* by metathesis (?).

Bábali 'grandmother.' Fem. of *bábŭs*, q. v.

Bábŭs 'grandfather' from Gk. *πάππος* 'grandfather.'

Bāl 'hair'; pl. *bālyor*=H. *bāl.*

Bállovas 'bacon, lard, pork'; *baulo* 'pig'+*mas* 'meat.'

Bānder 'divide, share'; conn. with H. *band* 'contrive, apportion' (?).

Bar 'garden, hedge.' See *bor.* Perhaps=P. *bagh* 'garden' (?). Note also H. *bāṛā* 'enclosure, arena'; more probable.

Bar 'stone'=P. *bar* 'burden' (?).

Barrin 'except'=Eng. 'barring.'

Bárvelo 'rich'; JAOS. vii. 211=Skr. *prabala* 'powerful' (?). Note also H. *bal* 'powerful.'

Bárya 'sea.' I think that this is from H. (Ar.) *bahīra* 'lake.' But see *dárya*, of which this *bárya* may be an accidental perversion.

Baulo 'pig.' JAOS. vii. 219 cfs. Skr. *balin* 'strong' (?). Cf. also Pott, 420 ff.

Bavól 'air, wind'; must=H. *pawān.*

Bawris 'snail.' Der. uncertain,

Beebee 'aunt; any elderly female relative'=P. *bībī* 'lady.'

Beeno 'born' (adj.)=H. *biānā* 'be delivered of a child.' Contains same root as Germ. and Celtic *be, bi* 'to be.'

Beero 'ship, boat'=H. *beṛā* 'raft.'

Bender 'across'; prob. Eng. slang from 'bend.'

Běng 'devil'; must be conn. with same root as Sl. *boh*, Russ. *bog* 'deity.'

Běnglískero 'devilish.' Adj. from *beng.*

Běngo-tem 'Hell'='devil country'; see *tem.*

Berángero 'sailor'; lit. 'ship-man'; see *beero.*

Běsh 'sit, lie'=H. *baiṭh-nā* 'to sit.'

Běsh 'year'=H. *baras*. Old form *bersh*.
Bicher 'send'=H. *bhej-nā*.
Bikkus 'bullet.' Uncertain der. See Pott, 397. Gk. βοκία (?).
Bikkin 'sell'=H. *bech-nā*.
Bish 'twenty' (rare)=H. *bīs*.
Bisser 'forget, lose'=C. *pobistérav* with Sl. particle *po-*=H. *bisār-nā* 'forget.'
Bitti 'little, a little'=Eng. 'bit.' Also as adj. *bitto*.
Bobbi 'breast-nipple, pea, bean'=Sl. *bab* (Bulg. *bop* 'bean'). The Eng. slang *bubby* 'breast' comes from this word.
Bok 'luck'; cf. *kushto bok* 'good luck'=T. (Ar.) *bakht* 'luck.'
Bŏkkalo 'hungry'=H. *bhūkh* 'hunger.' Note Old Rommany *bok* 'hunger'; also C. *bok* 'hunger.'
Bŏkro 'goat, sheep'=H. *bakrā* 'goat.'
Bollengro 'Christian.' I believe this means 'one who has hair,' as distinct from the shaven Mohammedan=*Nebōllengro*, q. v. See *bāl* 'hair.'
Bŏmbaros 'monkey'=H. *bandar* 'monkey'+R. ending *-os* (*us*).
Bonger 'bend, bow,' from *bongo*.
Bongo 'crooked, left hand'=C. *bango*=H. *bānkā* 'crooked, foppish.'
Bongo siv 'hook, crooked needle.' See *siv*.
Bonnek 'handful'; also Eng. cant=P. *burung*, *barang* 'gain, hoard' (JAOS. vii. 190).
Bor 'hedge.' See *bar*.
Boro 'big, large'=H. *baṛā*.
Bŏsh 'violin'=P. *bāzī-dan* 'play' (thus Borrow).
Bŏshno 'cock.' JAOS. vii. 173=Skr. *pakshin* 'fowl, bird.'
Bŏshoméngro 'violin player.' See *bosh*.
Bŏshto 'saddle'; clearly conn. with *bŏsh* 'sit.' Syn. of *pisali*, q. v.
Bov 'oven.' I feel compelled to connect this with Arm. *bov* 'stove.'
Bugnee 'small-pox,' conn. with H. *bāghi* 'bubo' (Pott, 397).
Buk 'belly'; conn. with *bok* 'hunger' (?).
Bull 'arse'=H. *bil* 'hole, burrow.'
Buller 'boil'; through French *bouillir* and Eng. 'boil,' probably influencing also a more primitive word based on H. *ubāl-nā* 'boil.'
Bŭng 'cork,' from Eng. *bung*, itself of uncertain derivation.

Bŭngaror 'cork-maker,' from *bung.*

Buoino 'proud, haughty.' Uncertain derivation.

Burk 'breast'=C. *beč.* Der. uncertain.

Búsaha 'spur'=C. *buzech.* See Pott, 429. Uncertain derivation.

Būt, būti 'much, very; work'=H. *bahut* 'much.'

Būti 'to work,' from *būt.*

Būtiéngro 'a servant'='worker.'

By 'sleeve'=C. *baj.* Perhaps=Mahratta *bahi* 'sleeve' (see Pott, 425).

Chācho 'true, faithful'=H. *sach* 'true, real.' See the more usual form *tācho.*

Chakker 'cover'=C. *čakkervava*, conn. with P. *chatr* 'umbrella, parasol.'

Chal 'fellow,' as in *Rommanichal* 'Gypsey fellow, gypsey.' Same word as *chāvo* with formative *l.* See *chy.*

Cham 'check,' conn. with *chūmer* 'to kiss.'

Cham 'leather' must=H. *cham* 'hide, skin.'

Chamyor 'cherries,' from idea of the fat cheek (?).

Char 'ashes.' Pott (212) says=H. *chhar* 'ashes.'

Char 'grass' must=H. root *char* in *charā-nā* 'graze, pasture'; H. *chāra* 'fodder.'

Chāvo 'boy.' Der. uncertain. See Pott, 183. Eng. slang 'shaver.'

Cherus 'time,' I derive from Sl. *čas* 'time.' Probably not Gk. καιρὸς, although this may have influenced it.

Chĭb 'tongue, language.' See *jĭb.*

Chichi 'nothing'=C. *či.* Prob. conn. with H. *nā-chīz* 'no thing.' I believe it is the same element seen in P. *chī* 'what.'

Chĭk 'dirt, filth, sand.' JAOS. vii. 200; Skr. *chikila* 'mud, mire.'

Chĭklo 'dirty'; from *chik.*

Chĭkno 'little, young'; prob. same root as H. *chhotā* 'little.' See the more usual form *tikno.*

Chĭn 'cut'; sometimes used for 'write.' JAOS. vii. 176; Skr. *chhid* 'cut.'

Chĭnaméskro 'chisel'='a cutter.'

Chĭngarée 'fuss, row'=Eng. slang *shindy*; from *chinger* 'tear.' Or it may be conn. with H. *chingārī* 'spark' (see just below).

Chĭngar 'spark'=H. *chingārī.*

Chĭnger 'to tear, rip.' Cf. JAOS. vii. 208: Skr. *chinker* 'pierce.'

Chiriklo 'bird'=H. *chiṛiyā.*

Chĭv 'put, set, place'; use. In C. *chivav* 'throw.' Der. uncertain.

Chō 'barley.'=H. *jau* 'barley.' See *jōb* 'oats.'

Chok 'cabbage.' See *shok.* This=H. *sāg* 'vegetables.'

Chokkas 'shoes; horseshoes,' prob. from T. *chariq* 'sandal.'

Chollo-tem 'universe.' Der. uncertain.

Chōn 'moon'=H. *chānd* 'moon.' See *shūl.*

Chong 'knee'=Skr. *g'anghā* 'leg'; H. *zānū* 'knee.'

Chonger 'kneel.'

Chōr 'steal'=H. *chorī* 'theft.'

Chōraméngro 'thief,' from *chōr.*

Chōro 'poor.' The mod. H. (P.) is *be-chara*; lit. 'without help'=*chara.* There may be a connection. Uncertain.

Chovihánee 'witch.' I seem to see in this a variant of H. *jādūgārnī* 'witch'; one who makes *jādū* 'magic.'

Chukko 'coat'; Eng. 'jacket.'

Chuknee 'whip'; according to Leland, the original of the Eng. 'jockey' (?). Note C. *čupni* 'whip.' =H. *chābuk.*

Chámanis 'anything, something'; must be conn. with H. and P. *chand* 'some, any.'

Chámano 'anyone, some one.' From *chámanis.*

Chāmba 'hill' can only be a variant of Mag. *domb* 'hill.'

Chūmer 'kiss'; a kiss=H. *chumma* 'a kiss'; vb. *chum-nā.* See *cham* 'cheek.'

Chunger 'spit' (noun and verb)=H. *thūk* 'spittle' (?).

Chūree 'knife'=H. *chhūrī* 'knife.'

Churro 'round' (in form) for C. *chullo*=*tullo*, q. v.

Chuvveno 'poor,' conn. with *chōro*, q. v.

Chy 'young girl'; *chavi*, fem. of *chavo.* See s. v. *chal* and *chavo.*

Dádas 'father'; also *dad*=C. *dad.* In many Indo-Eur. languages; cf. Welsh *tad*, Eng. *daddy*, etc.

Dant 'tooth'=C. *dand*=H. *dant.* Also='to bite.'

Dantiméngro 'pepper'=that which bites, from *dant.*

Dārya 'sea, river'=P. *dārya.* See *bārya* and *doeyav.*

Dĕl 'give'; 3 p. sing. from *dava* 'I give'=H. *de-na* 'to give.'

Dĕlleméskro 'a kicking horse'; lit. 'a giver,' from *del.*
Dĕsh 'tèn'=H. *das.*
Dīk 'look, see'=H. *dekh-nā.*
Dĭkkaben 'sight, vision, view,' from *dik.*
Dĭkkaméngro 'mirror'; lit. 'the seer.'
Dĭklo 'flag, rag, dishclout.' Same element as in *pong-dishler.* From Germ. *Tüchel* (thus Pott, 305).
Dĭnnelo 'fool, foolish'=C. *dylino*, from T. *deli* 'fool.'
Dĭvius 'mad, crazy.' Contains the root *div* 'crazy'=P. *divana* 'mad'; seen also in Sl. *divný* 'wonderful.' It may have come through the Slavic.
Dĭvvus 'dey.' Cf. H. *din* 'day.'
Doeyav 'sea, river'; variant of *dārya.*
Dordi (excl.) 'O my!' Der. uncertain.
Dori 'rope'=H. *dorī* 'cord, rope.'
Dosta 'enough'=Sl. *dosť.*
Dovo (pron.) 'that'; same element as in *adói.*
Drab 'poison, drug.' Der. uncertain.
Drabéngro 'physician, chemist.'
Drabéngro-kair 'drug-store,' with *kair* 'house.'
Dree tūb 'surprised'; lit. 'in amazement' (see *tūb*).
Drom 'way, road'=Gk. δρόμος.
Droméngro 'wayfarer.'
Drovân 'loud, violent.' Der. uncertain.
Drow 'poison, drug'; variant of *drab.*
Dŭbeno 'doubtful'=Eng. 'dubious' with ending *-no*
Dūd 'light, moon, lamp, month'; Pott, 310=Skr. *dyuti.*
Dūdĭkaben 'lightning'; used also slangily for 'deceive.' From *dūd.*
Dūdum 'gourd, womb'; must be from Armen. *tŭtúm* 'gourd.' Note JAOS. vii. 186=Skr. *dudruma* 'green onion' (?).
Dūee 'two'=P. *du*; H. *do.*
Duk 'pain; spirit.' Apparently two originals H. *dukh* 'pain' and Sl. *duch* 'breath; spirit.' See *dush.*
Dukker 'hurt,' from *duk* 'pain' and 'tell fortunes' from *duk* 'spirit.'
Dúkkerben 'a fortune,' as told by the Rommany in *pĕn a dúkkerben* 'tell a fortune.'
Dūmo 'back' (noun) H. and P. *dum* 'tail.'
Dūro 'far, distant'=H. *dūr.*

Dush 'trouble, pain.' Confused with *duk* 'pain.' Sl. *duša*= 'spirit, soul.'

Dūvel 'God'=H. *dev* 'god, demon.'

Dy 'mother'=H. *dāī* 'wet-nurse.'

Ennea 'nine'=Gk. *ἐννέα*.

Fúshono 'false'=Eng. 'false' and 'fashionable' derogatorily.

Fĕdedeer 'better'; same element as in H. *bih-tar* 'better' (*tar*=*-deer*).

Flick 'clever'=Germ. *flink*.

Fōki 'people'=Eng. *folk*.

Fordél 'forgive'=Eng. 'for'+*del* 'give,' q. v.

Foro 'city'=H. *pūr* 'city,' seen in many H. city-names, such as *Singapore*, etc. See Jour. Gypsy Lore Soc. i, 165= Greek *φόρος*

Foros 'city'=*foro* with *s*- ending.

Fūl 'dung, shit,' conn. with H. *phūl* '*menses*,' probably from *phūl-nā* 'swell.'

Gad 'shirt, chemise'=C. *gad*. Perhaps=H. *gudaṛ* 'rag.'

Gāv 'town, village'=H. *gaṅw*.

Gāv-mush 'policeman, constable.' · *Gav* 'town'+*mush* 'man.

Gavver 'hide, conceal'; prob. from same stem as H. *gupt* 'secretly.'

Geero 'person, fellow.' Can this be from Heb.-Yiddish גֵּר 'stranger'?

Gillee 'sing; a song.' Same root as in H. *gā-nā* 'sing.' In C. *gilavav*.

Giv 'wheat, grain, corn.' JAOS. vii. 187, connects this with Skr. *sītya* 'grain.' Note Sl. *žito* 'grain.' I do not believe it has to do with *yiv* 'snow' (against Pott, 67).

Godlee 'thunder, noise'; prob.=H. *galā* (throat), as in *galā phaṛnā* 'scream.' See *gudlo* 'story.'

Gorjo 'Gentile, one not a Rommany.' I believe this=*gavjo* 'a villager,' as distinct from those in the tents (?).

Górjiko 'Gentile' (adj.).

Grānya 'barn'=Eng. 'granary.'

Grasnee 'mare'; fem. of *gry* 'horse,' which also appears as *grast* in C.

Grūvnee 'cow'; fem. of *gūrū* 'bull.' Cf. H. *gaē* 'cow'; Skr. *go*, *gāu*.

Gry 'horse'=H. *ghoṛā*. In C. the form is also *gras*, *grast*, of which *grasnee* 'mare' is fem. The Eng. jargon has pre-

served the H. form better in *gry*. Cf., however, Arm. *grast* 'beast of burden.'

Gudlo 'story, noise'=*godlee*.

Gudlo 'sweet; honey.' A different root from *gudlo* 'noise,' but uncertain as to derivation.

Gudlo pesham 'bee; honey-comb.' See *pesham*.

Gūger 'growl'=H. *gurrā-nā*. Same stem as *gūr* 'bellow.'

Gullo 'throat'=H. *galā* and Eng. *gullet*.

Gunno 'bag; gunny'=H. *gon* 'sack.' Is Eng. 'gunny' from the Rommany?

Gūr 'bellow, roar'; see *gūger*.

Gūrū 'bull.' See *grūvnee*. The original Rommany word was *guruv* (see Pott, 141).

Gushto 'finger'=P. *angusht* 'finger.' See *angustro*.

Gúzvero 'wise, prudent'=C. *god'aver*. This must come from C. *godi* 'brain.' Cf. H. *gūdā* 'marrow, brain.'

Habben 'food, meal, dinner,' from *haw* 'to eat,' q. v.

Hāch 'wait, stop; pitch a tent' in *hach a tan*. In C. *ač*. JAOS. vii. 211 connects Skr. *ach* 'go towards, worship' (?)

Hadder 'lift'=C. *hadav* 'ruffle, stand on end' (see Pott, 173).

Hangar 'coal'=Skr. *angāra*; H. *angārā* 'embers, firebrand.' See *wongur*.

Harko 'copper'=Gk. χάλκωμα.

Harkoben 'copper.'

Haw 'eat'=H. *khā-nā*.

Hĕb 'heaven'; prob. a combination of Eng. 'heaven'+Sl. *nebe* (Boh.) 'heaven.'

Heezis 'clothes,' from Sl. (Boh.) *hazuka* 'cowl' (?).

Hĕfta 'seven'=Gk. ἑπτα.

Hĕrree 'leg, wheel of a wagon'=C. *cheroj* 'leg.' Doubtful derivation.

Hĕv 'hole, window'=H. *chhed* 'hole'; also H. *chhek*. The C. form is *chev*.

Hĭcher 'drag, draw'=Eng. *hitch*.

Hŏcher 'burn.' Der. uncertain.

Hŏchewĭchee=the Eng. hedgehog. Is there any connection with Eng. 'hedge'?

Hŏkker 'jump'=C. *chut'av*=H. *kūd-nā*.

Hora 'hour, watch, clock'=Ital. *ora*.

Hórkiben 'copper'; variant of *harko*.

Hŏvalo 'stocking'; prob. from Eng. 'hose,' with Rommany ending.
Hūfer 'cap'; prob. from Low Germ. *Hube*=*Haube* 'cap.'
Huker 'lie, boast, deceive.' Paspati (JAOS. vii. 196) cfs. Skr. *kuhanā* 'hypocrisy.'
Húkerben 'a lie.'
Húnnalo 'angry'; a variant of *shúnalo*, q. v.
Húnnaloben 'anger.'
Hushtee 'scamper'; cf. the excl. *hūsht*, common in the East to drive away animals.
Husker 'help' (?).
Jânwar 'animal'=H. *jānwar*.
Jaw 'go, walk'=H. *jā-nā*.
Jélliko 'apron'; clearly=Skr. *jālīkā* 'net, chain-armour, veil, woollen cloth.' Note H. *jālī* 'net-work, lattice, bag.'
Jĭb 'tongue, language' (see *chĭb*) =H. *jībh* 'tongue.'
Jĭn 'know, understand'=H. *jān-nā*.
Jínnaben 'knowledge.'
Jĭv 'live, dwell, exist'=H. *jī-nā*.
Jívvaben 'life.'
Jōb 'oats.' See *chō* and *jōv*.
Jonger 'wake, awake'=H. *jagā-nā*.
Jōv 'oats'=H. *jau* 'oats, barley.'
Jū 'louse'=H. *jūṅ*.
Júkkal 'dog'=T. *čakál* 'jackal.'
Jŭva 'woman'=H. *jorū* 'wife.' No conn. with *jū* 'louse,' though often jokingly compared.
Jŭvalo 'lousy'; see *jū*.
Kair 'house'=H. *ghar* 'house.'
Kair 'make, do'=*kar-nā*; P. *kardan*.
Kakkaráchee 'raven, magpie'=Gr. κόρακας.
Kâliko 'yesterday'=H. *kāl* 'yesterday' or 'to-morrow,' according to the verb tense.
Kāmlo 'dear, beloved,' from *kaum* 'love,' q. v.
Kâmmoben 'love' (abstract) and used as an adjective 'accustomed to.'
Kan 'sun'; often used as a test-word for strangers=C. *kam* (JAOS. vii. 219, cfs. Skr. *kan* 'shine'=Lat. *candeo*).
Kan 'ear'=H. *kan*.
Kanéngro 'rabbit.' Is it Germ. *Kaninchen* 'rabbit,' or from *kan* 'ear,' referring to the long ears of the rabbit?

Kâni 'hen; chicken'=*kachni* in Pott, 91–2=Skr. *kāhala* 'cock-bird.' I am not inclined to connect it with H. *hans* 'goose'; Skr. *hansa*, as the *k* seems to be inherent.

Kâro 'thorn'=H. *khar*.

Kas 'hay'=H. *ghas* 'straw, hay.'

Kas-stoggus 'hay-stack'; *kas*+*stoggus*=Eng. 'stack'+*us*.

Kātsi 'scissors'=H. *qaiṅchi*.

Kātsiméngro 'scissor-grinder.'

Kaulo 'black; lazy'=H. *kālā*.

Kaulo pani 'the ocean; the black water.' Also a mod. H. expression.

Kaum 'love, like'=P. *kam* 'desire.'

Kaun 'stink'; H. *gandh* 'perfume, scent, odor.'

Kaunlo 'stinking.'

Kāvi 'kettle.' See *kekávi*.

Kĕk 'no, none.' JAOS. vii. 203; *kayek*+*jeno*. This is *ka*+*yek*, *ka* being negative; cf. H. *koī* 'anybody, anyone.'

Kekávi 'kettle'=Gk. κακάβι 'kettle.' See *kavi*.

Kĕkker 'no, never.' See *kek*.

Kĕkkŭmee 'no more'=*kek*+*kūmee* 'more.'

Kĕl 'play any instrument' and 'sport'=H. *kel* 'coition; amorous sport.'

Kĕn 'count'=H. *gin-nā*.

Kĕnnâ 'now.' This is Old Rommany 'when'=C. *kana*. Seems to contain the same pronominal element as in H. *kahaṇ* 'where.'

Kĕnnâ-sig 'immediately'='now quick.' See *sĭg*.

Kĕrri 'home' (adv.) from *kair* 'house.' Perhaps corruption of old. Dat. *kēreske* 'to the house.'

Kerro 'made, ready'; for *kairdo* 'made' from *kair* 'make.'

Kessur (vb.) 'care.' Der. uncertain.

Késsur 'smoke' (noun). Der. uncertain.

Kétovos 'brush'; perhaps from Polish *kutas* 'broom.' Or is it Mag. *kefe* 'brush'?

Kĕttenus 'together'=C. *jeketane*. Contains *yek* 'one'+another dubious element (JAOS. vii. 2, 21).

Kíchema 'saloon; tavern'=Sl. *krčma* (in Mag. *koresma*, loan-word from Sl.).

Kil 'butter, cheese'=C. *ksil*, also *til*. Der. doubtful.

Kil-málliko 'cheese-cake.' See *malliko*.

Kil-tūd 'butter-milk.' See *tūd* 'milk.'

Kĭn 'buy'; conn. with *ken* 'count.'

Kĭnlo 'tired.' Is it conn. with H. *kīna* 'malice; vexation' Pott gives the form *kingervava* 'I am tired.'

Kĭpsi 'willow'; usually *kipsi-ruk*. Is this 'Gypsey tree' (=*ruk*) (?). They make baskets from the willow.

Kĭssi 'purse'=T. *keyse* 'sack, bag'; P. *kīsa*.

Kĭstur 'ride'=C. *glisav*. Prob. conn. with Boh. *klusati* 'trot.'

Klĭsin 'key; lock'=Gk. κλειδί(ον); P. *kalīd*; T. *kilij* 'key, lock.' Probably T.

Kókalos 'bone'=Gk. κόκαλον.

Kōko 'uncle'=P. *kākā* 'elder brother.' Cf. H. *kākā* 'paternal uncle'; fem. *kākī*.

Kókkero 'self'=C. *korkóro*. See Pott, 108–9.

Kommer 'care for'; prob.=Germ. *Kummer*. C. Scotch *kimmer*.

Kongli 'comb'=H. *kalgī*.

Kóngree 'church' a mixture of Gk. κυριακὴ and Eng. 'congregation.'

Kor 'eyebrow.' Is this conn. with *kor* 'nut,' or from H. *kor* 'blind'?

Kor 'nut'=C. *akor*=H. *akhroṭ* 'walnut.' *Kor* also means *membrum virile*.

Koráuna 'crown'; as in *pāsh-koráuna* 'half a crown.' Germ. *Krone*, and also Eng. 'crown.'

Kordo 'blind'=H. (P.) *kor* 'blind.'

Kōsher 'to lick'; really 'cleanse.' Prob. from Yiddish *kōsher* 'ritually pure' (food) = כָּשֵׁר.

Kŏsht 'stick'; JAOS. vii. 228=Skr. *kāshta* 'wood.'

Kováskaruk 'willow, laurel'=*Kováska*+*ruk* 'tree.' Der. uncertain.

Kŏvelo 'this.' See *akŏvo*.

Kŏvo 'this.' See *akóvo*.

Kóvva 'thing.' Der. uncertain.

Krâfnee 'button, nail'=Gk. καρφίον 'nail.'

Krâllis 'king'=Sl. *kral* 'king.'

Krâllisa 'queen'; fem. of *krâllis*. Sl. *kral'ovna* 'queen.'

Krĭs 'mustard.' Can this be P. *kurīs* 'cheese' misapplied?

Kūder 'open'; H. *khul-nā* 'open.'

Kŭkalo 'goblin'; same word as *kókalos* 'bone,' from idea 'skeleton, death's head.'
Kŭmee 'more'=Gk. ακόμη 'yet, more.'
Kun 'who'=H. *ko* 'who.' Not as common as *savo.*
Kunzus 'corner, end'=H. *konā* 'corner.'
Kūr 'beat, strike, fight.'=H. *kurh-nā* 'grieve, be afflicted.' But see Pott, 113 f.
Kūri 'pot'=*kurro* 'cup.'
Kūroméngro 'prize-fighter; soldier' from *kūr.*
Kurrikus 'week; Sunday'=Gk. κυριακή 'Sunday.'
Kurro 'cup' glass,' prob. same stem as *churro.*
Kushno 'silk'=C. *keš*=P. *kaž* 'coarse silk of little value.'
Kushto 'good, happy'=P. *khoš*, possibly through Turkish.
Kushto-dĭkkin 'good-looking.' See *dik.*
Kutter 'piece'; doubtful derivation. Probably from T. (Ar.) *qut'a* 'piece.' On the other hand, there is an Armen. word *godór* 'piece.' Which is it?
Ky 'where'=H. *kahaṅ* 'where.'
Lach 'find, meet'; prob. same root as in *lel*=*li*=H. *le.*
Lācho 'good, sweet.' Der. unknown; now rare.
Laj 'shame, shamed'; H. *lāj* 'bashfulness.'
Lāki 'she, her.' See Introduction.
Lango 'lame' (rare); H. and P. *lang* 'lame.'
Laster 'find'; variant of *lach.*
Lātti 'she, her': var. of *lāki.*
Lāv 'word'; P. (Ar.) *lafz* 'word.'
Lĕl 'get, receive, acquire'=3 p. of *liav* (C.)=*lela.* Cf. H. *le-na.*
Lĕnde 'they, them.' See Introduction.
Lĕster 'he, him.' See Introduction.
Lĕvinor 'ale, beer.' The *-r* is not inherent; cf. C. *lovina.* According to Pott, 335, from Wallachian *ol'avina* 'beer,' same element as in Eng, '*ale.*'
Lĭl 'letter, book'; 'anything written.' Prob. from Mag. *levél* 'letter.'
Lĭlli 'summer'=C. *linaj.* JAOS. vii. 218: *nilai.* Is it P. *līn* 'smoothness'?
Lollo 'red'; H. *lāl.*
Lom 'chalk, lime, clay'=Eng. 'loam.'

Lŭbeni 'whore, harlot,' from same stem as H. *lūbhā-nā* 'excite desire, lure.' This is also Sl. *l'ubit'* 'to love'; Eng. 'love,' etc. The form *lŭbeni* is closer to the original than the metathesis seen in the C. *nublí* 'harlot.'

Lŭdder 'kick'; H. *lāt* 'a kick.'

Lullero 'dumb'=P. *lāl* 'dumb.'

Lun 'salt'=H. *lonī* 'salt that effervesces from mildew.'

Lungo 'long'=Eng. 'long'; also H. *lambā.*

Lunter 'boast, brag'; H. *lantarānī* 'boasting.'

Lŭvvo 'money.' Der. uncertain. See Pott, 335.

Machka 'cat'; Sl. *mačka.* The original Skr. word was *mārjāra* ='cat'='one who cleans herself.'

Macho 'fish'; H. *machhlī* 'fish.'

Mâdūveléste 'God bless you.' *Maha*, same element as in H. *Maha-raja*+*Dūvel* 'God'+*leske*, Dat. 'to him', lit. 'may the great God be upon him.'

Málliko 'cake'; see *máriklo* and *kil-málliko.*

Malŭna 'lightning.' Uncertain. Pott, 456, gives Rom. *molnija*=Mag. *mennykö* 'lightning' (?)

Mān 'do not'; prohibitive only. Same as *mōr*=H. particle *ma* in *mabādā* 'by no means.'

Māndi 'I, me'; H. *maiṅ.*

Māng 'beg'; H. *māṅga-nā* 'ask for.'

Māngaméngro 'beggar.'

Mānro 'bread'=H. *mānṛī* 'starch.'

Mānshā (excl.) 'be of good cheer; cheer up.' Der. uncertain. Can it be T. (Ar.) *Māshallah*?

Manzin 'curse'; *chiv the manzin* 'put the curse.' The word in C. is *mancin*, prob.=Ital. *mancia* 'treasure' and refers in Rommany to the deception of the victim by the false treasure trick. Hence='a curse.'

Mâriklo 'cake'; same element as in *kil-málliko.* See *mānro.*

Māro 'our, ours'=H. *hamāra.*

Māro 'bread.' See *mānro.*

Māroméngro 'baker.'

Mās 'meat, flesh'=H. *mas* 'meat'; perhaps more directly from Sl. *mäso* 'meat.' Seen in Germ. Slavic loanword *Metzger* 'butcher' from Sl. *mäsiar.*

Māséngro 'butcher,' from *mäs.*

Masker 'middle, midst.' Perhaps Gr. μέσα 'in the middle of' (adv.).

Mātto 'drunk'=H. *mast* 'drunk; lustful.' Also Gk. μεθύω.

Mee 'mile'; prob. from French *mille.*

Méero 'my, mine'=H. *merā.*

Mende 'we, us'=H. *hameṅ.*

Mer 'die, kill'=H. *mar* 'a blow'; as in *mar lena* 'to kill.'

Michis 'mice'; most probably from Sl. *myš* 'mouse.'

Minch '*pudendum feminae.*' From a H. root the same as that seen in Lat. *mingo* 'I mix.' Cf. H. *amekhta* 'mixed.'

Míssali 'table'=Gk. μεσάλι(ον) 'table-cloth.'

Mĭshto 'glad, good.' Not so common as *kushto.* Uncertain. See Pott, 459–61.

Mŏkto 'box. Der. uncertain (see Pott, 437).

Mol 'wine'=P. *mul.*

Moléngree 'grape' from *mol.*

Molláuvis 'pewter' from Gk. μολύβριον.

Mŏm 'wax'=H. *mom*=T. *mūm.* Probably through the T.

Mŏmeli dūd 'candle'; lit. 'wax light.' See *dūd.*

Mōr; prohibitive 'do not'=*mān*, q. v.

Mōr 'kill; die'; var. of *mer*, q. v.

Morchi 'leather.' Certainly suggests Armen. *mort* 'skin, hide.' But also P. *mašk* 'leathern water bag.'

Morchiméngro 'tanner,' from *morchi.*

Morro 'bread.' See *mānro.*

Mŭee 'face; mouth'=H. *muṅh* 'mouth.'

Muk 'let, leave.' As *muk māndi be* 'let me be'; *Māndi'll muk tūte akŷ* 'I'll leave you here.' This must be the same root seen in H. *mukt* 'released, absolved, free' (see Pott, 434).

Muller 'die, kill'=3 p. sing. of *mer*=*meréla.*

Mullo 'corpse, dead man, ghost,' from *muller.*

Mun 'forehead'=C. *meň* 'neck.' Seems to be equivalent to H. *muṅh* 'mouth.' See *mŭee.*

Mush 'man'=Sl. *muž.* The older Rommany word even in England was *manush* of H. origin. *Manush* is still understood by old Rommanys. The question arises whether *mush* is not rather a contraction of *manush* than a direct derivative from Sl. *muž.*

Mushi 'arm'=H. *muṭṭhi* 'fist.'

Mutter 'urinate'=H. *mūt.*

Mutterméngri 'urinal'; also 'tea,' so called from its resemblance in its color to urine (?).

Myla 'ass'; same root as in Eng. 'mule.' Perhaps through Sl. *mulica* or Germ. *Maulthier*?

Nấflo 'sick'=C. *nasválo.* Can this be from Gk. νόσευμα pron. nósevma? See *wafro.*

Nāg 'worm'; see H. *nag* 'snake.'

Nāk 'nose'=H. *nāk.*

Nāngo 'naked'=H. *nangā.*

Nasher 'lose, forget, hang'=H. *nāsh* 'annihilation, ruin.' Also *nāsht* 'lost.'

Nav 'name'=H. *nanw.*

Nĕbolléngro 'unbaptized; one not a Christian.' See *bollengro.*

Nĕvvo 'new'=Sl. *nový.*

Nĭcher 'fidget, fuss.' Note that obsol. Eng. *nicher*='squeal.' Probably the same word.

Nŏko 'own' (adj.). Der. doubtful. Can it be conn. with P. *neko* 'good'; hence 'proper, own'?

Nucker 'neigh'=Eng. *nicker* 'neigh, squeal.'

Ny 'nail'; also 'finger-nail'=H. *nuh* 'talon.'

Okdo 'eight'=Gk. ὀκτώ.

Pabéngro 'cider';='of apples.'

Pabo 'apple'=C. *pchabo.* Seems to contain the same root as Fr. *pomme.* Very uncertain (see Pott, 378).

Padras 'stairs; stairway.' Probably conn. with H. *pad* 'foot.' But see Pott, 78, who doubts this.

Pal 'comrade, friend, brother'; same root as in Skr. *bhrātri* 'brother.' Cf. C. *pchral*=in form Lith. *brolis* 'brother.' Mod. H. *bhai* 'brother.'

Pāller 'follow'; probably from Eng. 'follow' suggested by *pal.*

Panch 'five'=H. *panj.*

Pândaben 'pound for confining animals,' from *pander.*

Pānder 'shut'=H. *bandh-nā* 'bind, shut.' Cf. H. *dārwaza bandh* 'shut the door'=Rom. *pānder the wūder.*

Pānee 'water'=H. *pānī.*

Panjer 'fist'; probably a hybrid of *panch* 'five'=five fingers+Slang 'puncher.'

Pappin 'duck, goose'=G. πάπια.

Párdel 'across'; same as *parl*=H. *par* 'opposite bank or shore; across.'

Parl 'across'; see *pardel.*

Párrako 'thanks, thank'; cf. *párrako tūte* 'thank you'=C. *parikérav*=Gk. παρακαλῶ 'I beg you, please'; viz., 'I beg you don't do it,' in a protesting thankful manner=an expression of gratitude.

Partan 'cloth'=H. *paṭṭu* 'woollen cloth.'

Pāsh 'half'=H. *pāsh-pāsh* 'shivered in pieces.'

Pāsh (prep.) 'along with'=H. *pās* 'near, beside.'

Pāsh-rāti 'midnight'—'half (*pāsh*) the night'=*rāti.*

Pátteran 'Gypsey trail of leaves and sticks'; also said to mean 'leaf'=H. *pattā*, *pattar* 'leaf.'

Pauli 'back, behind, after'=Gk. πάλιν. See *apopli.*

Pauno 'white.' *Pānī* in H. means both 'water' and 'lustre.' *Pauno* is prob. the same root.

Pee 'drink'=H. *pī-nā.*

Pĕkker 'bake, cook'=H. *pakā-nā.*

Pĕle 'testicles'=Skr. *pela* (JAOS. vii. 219).

Pĕll 'fall'=3 p. sing. of *per*=*peréla.* Cf. H. *paṛ-nā* 'fall.'

Pĕléngro 'stallion'='testicled (horse)'?

Pĕn 'say, tell, think'=C. *pchenav.* Paspati (JAOS. vii. 213) derives it from Skr. *bhan* 'say, speak.'

Pĕn 'sister'; prob.=H. *bahin* 'sister.'

Pĕnnis 'thing,' from *pen* 'to say'='a saying' (?).

Pĕsham 'bee'; see *pĭshom.*

Pĕssur 'pay'; Pott, 344: *pocinav* 'I pay'=Boh. *platce* 'a payer'; cf. Pol. *placič.*

Pĕt 'put'; Eng. *put.* See *chĭv.*

Pétul 'horse-shoe'=Gk. πέταλον.

Pĕtuléngro 'blacksmith,' from *pĕtul.*

Pĭlfro 'heavy,' conn. with H. *pilpilā* 'soft, flabby, flaccid.'

Pĭller 'attack'; H. *pil-nā* 'attack, assault.'

Píreno 'lover'—H. *piyār* 'love, affection.'

Píreni 'sweetheart'=H. *piyārā* 'sweetheart,' masc.; *piyārī*, fem.

Pĭrri 'foot'=H. *pair.*

Pĭrri 'walk,' from *pirri* 'foot.'

Pisáli 'saddle'; not so common as *boshto.* *Pisáli* seems to contain root *besh* 'sit.'

Pĭshom 'bee'=P. *peshsha* 'gnat.'
Pĭshŏta 'bellows.' Der. uncertain.
Pĭvli 'widow'=H. (P.) *bewa.*
Pĭvlo 'widower'; masc. of *pivli.*
Plaistra 'pincers, plyers'; a rare synonym of *tulaméngri* prob. =Sl. *kliešte* 'tongs.'
Plashta 'cloak, towel, dishcloth'=Sl. *plašt* 'cloak.'
Plochto 'glad.' Der. uncertain.
Pŏchi 'pocket'=C. *positi.* The form *pŏchi* was influenced by Eng. 'pouch.'
Póggado jib 'broken language'=the broken language of the roads. See *pogger.*
Pŏgger 'break, smash,' prob. from Skr. *bhag-nā* torn, broken; cf. H. *bhāg* 'share, portion' ('broken bit').
Pŏggobavéskro 'broken-winded' (horse), from *pŏgger*+*bavól* 'wind.'
Poknees 'magistrate'; cf. Sl. *Sudca pokoja* 'justice of the peace'; *pokoj* 'peace.'
Pong-dishler 'handkerchief'=*pong*, Eng. 'pouch, pocket'+ *dishler*, a mixture of 'dishclout' and *diklo*, q. v.
Porder 'fill up'=*pūrā* 'full.'
Pordo 'full.'
Pori 'feather, pen'=H. *par* 'feather'; cf. Sl. *perie* 'feather'; *pero* 'pen.'
Poris 'tail'; perhaps conn. with *pori.* But see Pott, 356–7.
Porji 'bridge.' Perhaps=P. *pul* 'bridge, embankment.'
Portus 'stair'; *portuses* 'stairs.' See *padras.*
Poshom 'wool'=P. *pashm* 'wool.'
Prāster 'run'; probably conn. with *pirri* 'foot, walk.'
Prāsterméngro 'policeman, runner,' from the old Eng. expression 'Bow-Street runner.'
Pre 'on, upon'; see *aprée.*
Pūcher 'ask'=H. *puchh-nā* 'ask.'
Pūder 'blow, shoot with a gun'=H. *phūl-nā* 'blow. Same root as in *fūl.*
Pūderméngro 'bellows'='blower.'
Pūker 'tell'=H. *pukār* 'cry, call'; vb. *pukārnā* 'shout.'
Púkkeno 'quiet, peaceful'=Sl. *pokojný* 'peaceful.'
Punsi-rān 'fishing rod.' The first element is H. *bansi* 'fish-hook'; i. e., *punsi-rān*='a hook rod.' See *rān.* *Punsi* =*bansi* alone seems lost in Eng. Rommany.

Pūr 'change.' Uncertain derivation.

Pūr 'feather, pen.' See *pori.*

Pūrjis 'road.' Same word as *porji* 'bridge.'

Pūro 'old'=H. *purānā* 'old.'

Pūrum 'onion, leek'=Ital. *porro* 'leek.'

Pus 'straw'=H. *phus* 'old dry grass' or 'straw.'

Pūsher 'bury'; probably conn. with *pūv* 'earth' (?).

Pūtsi 'pocket,' Variant of *pōchi.* The word is really Rommany and not English. Cf. C. *positi*, of which *pūtsi*, the older form, is a metathesis. These forms come from the same original as Eng. 'pouch.'

Putti 'hub,' from same root as H. *paṭṭi* 'felly of a wheel; girdle.'

Pūv 'earth, dirt, ground, floor'=H. *bhūīn* 'earth, ground.'

Pūvéngri 'potatoes'; 'of the earth.'

Pūv-sūver 'spider'; lit. 'an earth swimmer' (see *sūv*) from the motions of the insect.

Pýas 'fun, amusement.' See C. *pchéras.* Der. uncertain.

Rāker 'talk, speak, converse'; *can you rāker Rómmanes* 'can you talk R.'? The original form was clearly *vrakeráva* (JAOS. vii. 216). This is not, as Paspati thought, from *vra*+*keráva* 'I make talk,' but=H. *bhākhā* 'speech, dialect.' The initial *v*=prim. *bh* has been entirely lost in the Eng. Rommany. Note in Sl. *vravet'* 'speak.'

Rāklo 'young lad, boy'=H. *laṛka* 'boy.'

Rākli 'girl, marriageable girl'=H. *laṛki* 'girl.'

Rān 'cane, rod, reed'; Pott, 266 gives the der. from Germ. *Rahne* 'a thick piece of wood.'

Rānee 'lady'=H. *rānī* 'queen.'

Rashy 'priest, minister' plainly=Skr. *ṛishi* 'saint, holy man'; also H.

Rāt 'blood,' probably=H. *zāt*, by rhotacism.

Rāteno 'dark,' from *rāti* 'night.'

Rātenus 'darkness,' from *rāti* 'night,' the *nus-* ending being the Eng. *-ness.*

Rātéskro 'bloody,' from *rāt* 'blood.'

Rāti 'night'=H. *rāt* 'night.'

Rĕpper 'remember'; Pott, 334, gives *lepperav.* Der. doubtful. The *r* in *repper* is plainly due to the Eng. *remember.*

Rĭk 'side, direction.' I believe that this is the same root as in *rikker* 'bring.'

Rikker 'bring, fetch, carry'; probably=H. *rok-nā*, *rakh-nā* 'hold, keep.'

Ríkkorus 'side'; longer form of *rik*.

Rin 'file' and 'to file'=Gk. ρινί.

Rínkeno; fem. *rínkeni* 'pretty, handsome.' I cannot place this.

Riv 'wear' (as clothes). Does this contain the Gk. root of ῥάπτης 'tailor'?

Rívvabens 'clothes,' from *riv*.

Roi 'spoon'=H. *ḍoi* 'wooden spoon.'

Rokámyas 'trousers.' Very difficult. Is this a perversion of Sl. *rukavičký* 'gloves'?

Rŏm 'husband; Gypsey'=the gentilic name. See Jour. Gypsy Lore Soc. i, pp. 16 ff.

Rŏmmanes 'the Gypsey language,' from *rŏm*.

Rŏmni, fem. of *Rŏm* 'a wife'; 'a Rommany woman.' See *rummer*.

Rŏmnichāl 'a Gypsey fellow'; the usual word for 'Gypsey' in general.

Rŏmnichy 'Gypsey girl'; fem. of *Rŏmnichāl*.

Rŏv, ***row*** 'weep'=H. *ro-nā* 'weep.'

Ruk 'tree'=H. *rūkh* 'tree.'

Rukestaméngro 'squirrel; tree creature,' from *ruk*.

Rummer 'to marry,' from *rŏm*.

Rúmmerben 'marriage, wedding.'

Rup 'silver'=H. *rūpā*; cf. *rupee* 'silver coin.'

Rúppeno 'silvern' (adj.), from *rup*.

Rūzha 'flower'=Sl. *ruža* 'rose.'

Rūzhno 'bright, shining,' probably from *rūzha* 'flower.'

Rūzlo 'bold'=C. impersonal vb. *rušav man* 'I irritate myself, I get angry.' Der. uncertain.

Ry 'gentleman'=H. *raja* 'king.'

Ryéskro 'genteel' from *ry*.

Shālee 'rice'=H. *chanwal* 'rice' (?).

Sham, ***shan*** 'evening'=H. *sham*.

Shell 'cry, shout'=3 p. sing. of *shōr*=*shōréla*. See *shōr*.

Shĕlno 'green'=Sl. *zelený*.

Sherro 'head, chief'=H. *sir*; also *sar* in *sardar*; P. *sar*, Zend. *šara*. The *š* also appears in Skr.

Sherroméngro 'leader, head-man,' from *sherro*.

Shill 'ice'; cf. H. *sītal* 'cool'; Skr. *çītā* 'cold, frozen.'
Shĭngerballo 'horn' (of a cow or bull)=H. *sīng*; Skr. *çringa* 'horn'+*ballo*, prob.=*bāl* 'hair.'
Shok 'cabbage'; see *chok*.
Shok 'bough, branch'=H. *sāg* 'greens, vegetables.'
Shokker 'cry out, call'=H. *jaikar karna* 'raise a hubbub.'
Shōr 'praise, boast'=H. *shor* 'cry, noise.'
Shōshoi 'hare'; may=Skr. *çaça* 'hare' (JAOS. vii. 190).
Shov 'six'=H. *chha*.
Shtor 'four'=Skr. *chatur*, but probably influenced more immediately by Sl. *štyri* 'four.'
Shubo 'dress, gown'=Russ. *šuba* 'fur-coat.'
Shūl 'whistle'; corr. of *shell*=*shōréla*.
Shūl 'moon'; corr. of *chōn*.
Shŭlam 'greeting,' from Yiddish *shōlem*=שלום.
Shummi 'awning'=H. *shamiyānā*.
Shūn 'hear'=H. *sun-nā*.
Shŭnalo 'angry.' Probably contains same root as H. *jalā-nā* 'get angry,' seen also in H. *jalā-balā* 'fretful.' See *hunnalo*.
Shūt 'vinegar'=Gk. ξύδι.
Shūto 'sour,' from *shūt*.
Shŭvali 'enceinte.' Probably H. See Pott, 220.
Shýan 'perhaps'=H. *shāyād*.
Sāja 'always'; combination of *saw* 'all'+*cherus* 'time.'
Sāp 'snake'=H. *saṅp*, also *sarp*.
sar 'all, how'; var. of *saw* 'all, how.'
Sârishân 'how do you do'? The regular Rommany greeting. *Sar* 'how'+*shan*=2 p. of 'to be'='you are.'
Sāshta 'iron kettle support'; see *saster*.
Saster 'iron'; JAOS. vii. 194=Skr. *çastra* 'weapon of iron.'
Sasterno 'iron' (abj.). From *saster*.
Sasto 'strong'; cf. H. *saḳht* 'strong, hard.'
Saula 'morning'; Pott, 289 gives Skr. *sāya* 'evening' (?).
Savo 'who'; contains element *saw*, *so* 'what.' More common than *kun*.
Savvi 'laugh'=C. *asáva*=H. *haṅs-nā*.
Saw 'all'=H. *sab*; P. *har* as in *har-kas* 'everyone.'
Saw 'how.' Not common. Prob.=*so* 'what.'
Saw-sĭg 'immediately'; 'all quick.' See *sĭg*.

See 'heart, mind, soul'=C. *yilo* and *dschi*. See s. v. *Zee*.
Se 'it is' (rare now)=C. *hi*=H. *hai*.
Serber 'capture,' perhaps same root as in *súrrelo*.
Sĭg 'quick, fast'; JAOS. vii. 210=Skr. *śīghra*.
Sĭg o' me zee 'anxious.' Not 'quick of heart,' but probably Eng. 'sick of heart,' possibly influenced from an early *zik* from H. (Ar.) *zīq* 'depression.'
Sĭgger 'hurry,' from *sig* 'quick.'
Sĭkker 'show'=H. *dikhlanā*, or is it Skr. *śiksh* 'learning' (JAOS. vii. 196)?
Sĭm 'like unto'=Eng. 'same,' and *simensi*. *Sims* also='like (prep.). Cf. Skr. *sama* 'same.'
Sĭménsi 'relatives'=H. *samān* 'equal, similar.'
Sĭmmun 'soup, broth'=Gk. ξουμίον 'broth.'
Sĭ 'needle,'=H. *sūī*.
Sĭv 'sew'=H. *sī-nā* 'to sew'; *sīwān* 'a seam.'
Skammin 'chair'=Gk. σκαμνί 'bench, chair.'
Skūnya 'boot'=Boh. *škorne* 'big peasant boots.'
So 'what'=H. *jo* 'what.'
Solivâris 'bridle, harness'=Gk. συλληβάρι.
Sonnaky 'gold'=H. *sonā*.
Sosse 'what is'?=*so*+*se*.
Sóvahaul 'curse, swear.' Also *sollahaul*. Doubtful. See Pott, 228.
Sōv 'sleep'=H. *so-nā* 'sleep'; ptc. *sotā*.
Spĭnya 'pin'=Eng. *pin* (?).
Staddi 'hat'=Gk. σκιάδι 'hat, sunshade,' from σκιά 'shadow.'
Stānya 'barn, stable,' prob.=H. *sthān* 'place, station.'
Stardo 'imprisoned'; not from Ar. *asīr* 'prisoner' (thus Bor.). Can it be H. *asthir* 'at rest, quiet'? See *stariben*.
Stariben 'prison'; see *stardo*. This has been shortened in American thieves' and tramps' slang into *stir* 'prison.'
Stĭfi-dy 'mother-in-law'; 'stepmother.'
Sūder aprée 'hang up.' Can this=H. *sudhar-nā* 'adjust'?
Súkaro 'sorry, grieved.' Can this be H. *sukwār* 'feeble'?
Sūm 'smell'=H. *sūngh-nā*.
Súrrelo 'strong'=P. *zor* in *zor-dar* 'powerful.'
Sus 'was' (rare now)=C. *his*.
Sūtto 'a dream, to dream.' Conn. with H. *so-nā* 'sleep'; *sotā* 'asleep.' Cf. Pāli *sutto*, *suttam* 'asleep,' 'a dream.'
Sūv 'swim'=H. *dūb-nā* 'drown, be immersed.'

Swĕgler 'tobacco-pipe'; a common word, but uncertain derivation. Can it be conn. with Gk. σφαίρα 'ball,' referring to the bowl of a pipe?

Swĕtti 'world'=Sl. *svet.*

Tācho 'true, faithful.' See s. v. *chacho* for derivation.

Tāchoben 'truth'; from *tācho.*

Tāder 'draw, drag, attract'=C. *trdav, zerdav, crdav.* Perhaps from Sl. root *trh*?

Talley 'below, under'=H. *tale* 'under, below.'

Tam 'shade'=H. *tama* 'darkness.'

Tamlo 'dark, shady,' from *tam.*

Tan 'tent, place.' Vb. 'live in tents, camp'; *we're tannin' aký* 'we're camping here.' I believe this is the Mag. *tanya* 'camp,' rather than the H. *thān* 'stall'; *thāna* 'police-station.'

Tāno 'young, little'=Skr. *taruṇa* 'young' (?).

Tardo 'straight'=*tāderdo* 'drawn out,' from *tāder.*

Tarri 'drag, draw, pull'; var. of *tāder.*

Tasser 'choke, smother, suffocate'=C. *tasl'arav* 'I dip in.' Der. uncertain. Prob. connected with Ital. *tossire.*

Tātto 'hot, warm'=Skr. *tap* 'heat' (JAOS. vii. 166). Cf. H. *tap* 'fever.'

Tātto pāni 'brandy, whiskey'; lit. 'hot water.'

Tav 'string, cord'=P. *tav(e)* 'twist, coil.'

Teero 'thy, thine' (rare now)=H. *terā* 'thy.'

Tem 'country, land'; Gk. δέμα 'province.'

Témesko 'landed, as a proprietor' from *tem.*

Tikno 'young, small'; see *chikno.*

To-dĭvvus 'to-day'; Eng. *to*+*dĭvvus* 'day.'

To-rāti 'to-night'; Eng. *to*+*rāti* 'night.'

To-saula 'to-morrow'=Eng. *to*+*saula* 'morning.'

Tōv 'wash'; H. *dhō-nā*; cf. *dhōbī* a 'washerman.'

Tōver 'axe'=P. *tabar* 'axe.'

Trāsh 'fear' (noun)=H. *tars* 'fear, terror.'

Trāsher 'frighten,' from *trāsh.*

Trin 'three'=H. *tri, tīn.*

Truppo 'body'=Sl. *trup* 'rump'; Russ. *trup* 'corpse.'

Trúshilo 'thirsty'=H. *tishna* 'thirsty'; *tishnagī* 'thirst.'

Trúshnee 'basket'; a corruption of Gk. Rommany *koshnika* (JAOS. vii. 166)=Sl. *kóš* 'basket'; cf. Boh. *kušatka*: Bulg. *koš, košnitza.*

Tūb 'amazement'=H. (P.) *shūbhā* 'doubt' (?).
Tūd 'milk'=H. *dūdh.*
Tūfer 'mend, cure.' Der. uncertain.
Tugnus 'grief, sorrow': conn. with *duk.*
Tukli 'trouble' grief'; conn. with *duk.*
Tūl 'hold, manage'; seen also in racing slang; *tool a horse*= 'manage a horse'; *tool a coach*, etc. Prob.=H. *tul-nā* 'be weighed, balance' (?).
Tūlamúngri 'pincers, plyers' from *tūl.* See syn. *plaistra.*
Tullo 'fat'=C. *tchulo* 'fat'=H. *sthūla* 'thick.' Also *chullo*; see Pott, 296.
Túlloben 'grease, fat,' from *tullo.*
Tūnero 'bold, brave.' Der. uncertain.
Tūté 'thou, you'=H. *tū.*
Tūv 'smoke' (vb. and noun)=H. *dhūāṅ.*
Tūvalo 'tobacco,' from *tūv.*
Vāg 'flame'; conn. with *yāg* 'fire.' Is this the same root seen in Ital. *vampa* 'flame'?
Vāniso 'anything, something' (rare). This=C. *vareso.* Indef. particle *vare*+*so* 'what.' This particle *vare* occurs in C. *vare-har* 'anyhow'; *vareko* 'anyone,' etc. *Var*='a part' =H. *wār* in composition 'having, endowed with.'
Vĕndri 'guts, entrails'=H. *antri* 'entrails.' *Vendri* is also pronounced *wendri* and *wendror.*
Vériga 'chain.' Doubtful. See Pott, 80.
Vongree 'waistcoat.' Der. uncertain. Also pronounced *wongree.*
Vonka 'when' (rare). Looks like Eng. *when*; Germ. *wenn*, *wann*?
Voro 'flour, meal'=C. *varó* 'meal.' I believe this is conn. with *manro*, *māro* 'bread.'
Wadras 'bed, couch'=Eng. *mattrass*?
Wāfedo 'bad.' See *wafro.*
Wāfro 'bad'; conn. with *nāflo* 'sick'?
Wallin 'glass'=Gk. γυαλί.
Wardo 'wagon, carriage'=C. *verda*: prob.=P. *gardūn* 'wheel, chariot.' The *w* and *v* in Eng. Rom. and C. respectively were probably caused by *wagon* and Germ. *wagen*; Sl. *vóz* 'wagon.'
Wast 'hand' must=P. *dest*, but how explain the *w*?

Wastaméngri 'gloves, handcuffs,' from *wast.*

Wāvver 'other, another'; prob.=H. *aur* 'more, other.'

Wĕll 'come'=3 p. sing. of *av*=*avéla* =*awéla*=*well.*

Wĕllgŭra 'fair, exposition.' Note here that according to Harris, *vailgoro* 'fair in color.' If this is correct—I have never heard it so used—then the last element must=H. *gōrā* 'fair, handsome.'

Wĕn winter.' Pott, 66, gives **jevend*=Skr. *hēmanta* 'winter,' Gk. χειμών.

Wĕsh 'wood, forest, wild land'=P. *bēša, bīša* 'forest' (see JAOS. vii. 173).

Wĕshno 'wild,' from *wesh.*

Wĕshno jukkal 'fox'='wild dog.'

Wóngashee 'finger-ring,' a var. of *angustro.*

Wongur 'coal, money'=H. *angārā* 'embers, fire-brand.' The use of *wongur* for 'money' is slangy metaphor from the shining coals. See *hangar.*

Wūder 'door'=H. *dwar, duvar* 'door, gate-way,' a case of metathesis. The common H. word is *dārwazā*, containing the same element; *dar*=Eng. 'door.'

Wusser 'throw, pitch'=H. *pachhaṛ-nā* 'throw down' (?).

Yāg 'fire'=H. *āg.*

Yāgéngeri 'gun,' from *yāg.*

Yāg-wardo 'automobile'; a new word=*yāg* and *wardo.*

Yahŭd 'Jew,' from Yiddish יהוד.

Yāk 'eye'=H. *āṅkh.*

Yākéngeri 'spectacles,' from *yāk.*

Yĕk 'one'=P. *yek*; H. *ek.*

Yĕkkorus 'once'; contraction from *yek*+*cherus* 'time.'

Yĭv 'snow' (noun and vb.). See *gĭv* 'grain.' But is not *yĭv* rather conn. with Skr. *hima* 'snow' (JAOS. vii. 216)?

Yoi 'she'=H. *wuh* 'he, she, it.' Fem. of *yov* 'he.'

Yora 'egg'=C. *yáro, vanró.* I believe this is merely a corruption of T. *yumurṭa* influenced also by Gk. αὐγόν. H. *aṇḍa* means 'an egg'; but is probably not connected with *yora.*

Yov 'he'=H. *wuh* 'he, she, it.' Masc. of *yoi* 'she,' q. v.

Yozho 'clean, pure'; corr. of C. *shuzó* (*shuchó*)=Skr. *śuchi* 'make pure' (JAOS. vii. 173).

Zee 'heart, soul, mind.' Cf. *see.* Conn. with H. *jī-nā* 'live' (see *jĭr*).

English—Rommany.

Accustomed to *kâmmoben*; see used.
Across *atút*, *bender*, *pardel*, *parl*.
Afraid *atrásh*.
After *pauli*.
Again *ajáw*.
Against *atút*.
Air *bavól*.
Ale *lĕvinor*.
Alehouse *kĭchema*.
Alive *jĭvvin'*.
All *saw*.
All at once *saw-sĭg*; *kĕnná-sĭg*.
Alone *akónyo*.
Along with *pāsh*: 'long o'.
Aloud *drovân*.
Already *ajáw*.
Always *sāja*.
Amazed *dree tūb*.
Amazement *tūb*.
Amusement *pýas*.
Anger *húnnaloben*.
Angry *húnnalo*; *shûnalo*.
Animal *janwar*.
Answer *pūker*.
Anxious *sĭg o' zee*.
Anyone *chûmano*.
Anything *chûmanis*, *vâniso*.
Apple *pābo*.
Apron *jĕlliko*.
Arm *mushi*.
Arse *bull*.
Ashamed *laj*.
Ashes *char*.
Ask *pūcher*.
Asleep *sutto*.
Ass *myla*.
Astonish *chĭv dree tūb*.
At *aprée*.
Attack *pĭller*.
Attract *tāder*.
Aunt *beebee*.
Automobile *yāg-wardo*.
Awake *jonger*.
Away *adrom*.
Awning *shummi*.
Axe *tōver*.
Baby *tĭkno*, *chĭkno*.
Back (n.) *dūmo*.
Back (adv.) *apópli*, *pauli*, *anpáuli*.
Bacon *bâllovas*.
Bad *wāfro*, *wâfedo*.
Bad tempered *húnnalo*, *shûnalo*.
Bag *gunno*.
Bake *pĕkker*.
Baker *māroméngro*.
Ball *churro*.
Bar *sāshta*.
Barley *chō*.
Barn *grānya*.
Basket *trushnee*.
Bean *bobbi*.
Beat *kūr*.
Bed *wadras*.
Bee *pĭshom*, *pĕsham*.
Beer *lĕvinor*.
Before *aglál*.
Beg *māng*.
Beggar *māngaméngro*.
Begin *ānkáir*.
Bellow *gūr*.
Bellows *pishota*, *pūderméngro*.
Belly *buk*.
Beloved *kāmlo*.
Below *talley*, *aláy*.
Bend *bonger*.
Beneath *talley*, *aláy*.
Benevolent *kāmmobéskro*. See *kaum*.
Bent *bongo*.
Better *fĕdedeer*.
Big *boro*.
Bird *chĭriklo*.
Bishop *boro rashy*.
Bit *kutter*, *bitti*.
Bite *dant*.
Black *kaulo*.
Blacksmith *pĕtuléngro*.
Blind *kordo*.
Blood *rāt*.
Bloody *rātéskro*.
Blow *pūder*.
Boast *lunter*, *puker*.

Boat *beero.*
Body *truppo.*
Boil *buller.*
Bold *rūzlo, tûnero.*
Bone *kŏkalos.*
Book *lĭl.*
Boot *skūnya.*
Born *beeno.*
Bough *shok.*
Bow (vb.) *bonger.*
Box *kūr.*
Box (n.) *mŏkto.*
Boy *chāvo, rāklo.*
Brag *lunter huker.*
Branch *shok.*
Brandy *tāttopānee.*
Brave *rūzlo, tûnero.*
Bread *manro, morro, maro.*
Break *pŏgger.*
Breast *burk, bobbi*=nipple.
Breath *pūderben, bavól.*
Breathe *pūder*
Bridge *porji.*
Bridle *solivâris.*
Bright *rūzhno.*
Bring *rĭkker*
Brokenwinded *poggobavéskro.*
Broth *sĭnmun.*
Brush *kĕtovos.*
Bull *gūrū.*
Bullet *bĭkkus.*
Burn *hocher.*
Bury *pūsher.*
Butcher *maséngro.*
Butter *kil.*
Buttermilk *kil-tūd.*
Button *krâfnee.*
Buy *kĭn.*
By=near *pāsh.*
By and by *kĕnná-sig.*
Cabbage *shok.*
Cake *máriklo, mállíko.*
Candle *mŏmeli dūd.*
Cane *rān.*
Cap *hūfer.*
Captain *shĕrroméngro.*
Capture *serber.*
Care *kommer*; (n.) *kessur.*
Careful *sĭg.*
Carriage *wardo.*
Carry *rĭkker*
Cat *machka.*
Chain *vĕriga.*
Chair *skammin.*
Chalk *lom.*
Change *pūr*
Cheek *cham.*
Cheer up! *mānshā!*
Cheese *kil.*
Cheese-cake *kil-mállíko.*
Chemist *drabéngro.*
Chew *haw.*
Chickens *kānis.*
Chief *sherroméngro.*
Child *tĭkno, chĭkno, chāvo*; fem. *chy.*
Chisel *churee*; *chĭnaméskro.*
Choke *tasser.*
Christian *bolléngro.*
Church *kongree.*
Cider *pābéngro.*
City *foro, foros, gāv.*
Clay *lom.*
Clean *yozho.*
Cleanse *yozher, kōsher.*
Clever *flick.*
Cloak *plāshta.*
Clock *hora.*
Close=shut *kūder.*
Cloth *partan.*
Clothes *heezis, rĭvvabens.*
Coal *hangar, wongur.*
Coat *chukko.*
Cock-bird *bŏshno.*
Cold *shĭllo.*
Comb *kongli.*
Come *well*; imper. *av, hav.*
Commence *ānkáir.*
Comrade *pal*
Constable *gāv-mush.*
Cook *pekker*; see bake.
Copper *harko, hárkoben, hórkiben.*
Cord *tav.*
Cork *bŭng.*
Cork-maker *bŭngaror.*
Corn=grain *giv.*

Corner *kunzus*; see end.
Corpse *mullo*.
Couch *wadras*.
Count *kĕn*.
Country *tĕm*.
Cousin *kōko*; also uncle; *beebee* (fem.).
Cover *chakker*.
Cow *grūvnee*.
Crazy *dĭvius*.
Cream *fino-tūd*.
Crooked *bongo*.
Crow-bar *sāshta*.
Crown *koráuna*.
Cry *rov, row*. See weep.
Cry out *shĕll, shokker*.
Cup *kurro*.
Cure *tūfer*; see mend.
Curse *sŏvahaul*.
Custom *drom*.
Cut *chĭn*.
Dance *kĕl*.
Dark *rāteno*; *tamlo*.
Daughter *chy*.
Day *dĭvvus*.
Dead *mullo*.
Dear *kāmlo*.
Death *múllerben*.
Deceit *húkerben*.
Deceive *huker*. See lie.
Devil *Bĕng*.
Devilish *bĕngliskero*.
Die *mer, mōr, muller*.
Dinner *habben*.
Direction *rĭk, rĭkkorus*.
Dirt *pūv*; *chĭk*.
Dirty *chĭklo*.
Disease *nāfloben*. See sick.
Dishclout *dĭklo, pongdishler*.
Distance *dūroben*.
Distant *dūro*.
Divide *bānder*.
Divine *Dūvelsko, Dūveléskro*.
Do *kair*.
Do not *mān, mōr*.
Doctor *drabéngro*.
Dog *jukkal*.
Donkey *myla*.
Door *wūder*.
Doubtful *dūbeno*.
Down *talley, aláy*.
Drag *tāder, tarri, hĭcher*.
Dream *sútto* (n. and vb.).
Dress *shūbo* (woman's dress); *heezis*; see clothes.
Drink *pee*.
Drug *drab*.
Drug-store *drabengro-kair*.
Drunk *matto*.
Duck *pappin*. See goose.
Dumb *lullero*.
Dung *fūl*.
Ear *kān*.
Early *sĭg*; see quick, fast.
Earth *pūv*.
Eat *haw*.
Egg *yora*.
Eight *okdo*.
End *kunzus*. See corner.
England *pūro tĕm*; *Anglatérra*.
English Language *Górjines*.
Enough *adósta, dosta*.
Entrails *vĕndri*.
Evening *sham, shan*.
Evil *wāfroben*.
Eye *yāk*.
Eyebrow *kor*.
Eyeglasses *yākéngri*.
Except *barrin*.
Exclaim *shĕll, shokker*.
Exhibition *wellgára*.
Face *mūee*. See mouth.
Fair *wellgára* (exhibition).
Faithful *chācho, tācho*. See true.
False *fáshono*.
Family *siménsi*.
Fancy *kaum*.
Far *dūro*.
Farmer *givéskro*.
Fast (rapid) *sĭg*.
Fat *tullo*.
Father *dādas*.
Fear (n.) *trāsh*; vb. *trāsher*.
Feather *pori*.
Fellow *chal, geero*.
Fiddle *bŏsh*.

Fiddler *bŏshoméngro.*
Fidget *nĭcher.*
Field *pūv.*
Fiery *yāgsko.*
Fight *kūr.* See beat.
File *rĭn* (n. and vb.).
Fill *porder.*
Filth *chĭk.*
Find *lach, laster.*
Finger *gushto.*
Finished *kerro.*
Fire *yāg.*
Fish *macho.*
Fishing-rod *punsi-rān.*
Fist *panjer.*
Five *panch.*
Flag *diklo.*
Flame *vāg.*
Flour *voro.*
Flower *rūzha.*
Folk *fōki* See people.
Follow *paller.*
Food *habben.*
Fool *dĭnnelo.*
Foot *pĭrri.*
Forehead *mun.*
Forest *wĕsh.*
Forget *nāsher.* See lose.
Forgive *fordĕl.*
Fortune *dúkkerben.*
Four *shtor.*
Fox *wĕshno, jukkal.*
Friend *pal*
Frighten *trāsher.*
Full *pordo.*
Fun *pŷas.*
Further *dūrodeer.*
Furthest *dūrodeero.*
Fuss *chingaree*: vb. *nĭcher.*
Gallant *buoino.*
Garden *bar.*
Genteel *ryéskro.*
Gentile (non-Rommany) *Gorjo*: adj. *Górjiko.*
Gentleman *ry.*
Get *lĕl.*
Ghost *mullo.*
Girl *rākli, chy.*
Give *dĕl.*
Glad *plochto, mishto, kushto.*
Glass *wallin*; *kurro.*
Glove *wastamengro.* See handcuff.
Go *jaw.*
Goat *bŏkro.*
Goblin *kŭkalo.*
God *Dūvel.*
God bless you *Madūvelĕste.*
Gold *sonnaky.*
Good *kushto, mishto, lacho.*
Good-looking *kushto-dikkin.*
Goose *pappin.* See duck.
Gourd *dūdum.* See womb.
Gown *shūbo.*
Grain *gĭv.*
Grandfather *bŭbus.*
Grandmother *Bŭbali.*
Grape *molĕngri.*
Grass *char*
Grease *tulloben.* See fat.
Green *shĕlno.*
Greeting *shŭlam*; *sŭrishŭn.*
Grief *dush, tukli, tugnus.*
Grieved *sŭkaro.* See sorry.
Ground *pūv.*
Growl *gūger.*
Gun *yāgéngri.*
Guts *vĕndri.*
Gypsey *Rŏm, Rŏmni-chal*; fem. *Rŏmni, Rŏmni-chy.*
Gypsey Language *Rŏmmanes.*
Hair *bāl*; pl. *bālyor.*
Half *pāsh.*
Hand *wast.*
Handcuff *wastaméngro.* See glove.
Handfull *bonnek.*
Handkerchief *dĭklo*: *pong-dishler.*
Handsome *kushto-dikkin*; *rĭnkeno.*
Handy *flick.*
Hang up *sūder aprée.*
Hare *shōshoi*
Harlot *lūbeni,*
Harness *solivŭris.* See bridle.
Hat *staddi.*
Hay *kas.*
Hay-stack *kas-stoggus.*
He *yov, lester.*

Head *sherro.*
Hear *shūn.*
Heart *see, zee.*
Heathen *nĕbolléngro.*
Heaven *hĕb.*
Heavy *pūlfro.*
Hebrew *Yahûd.*
Hedge *bor.*
Hedge-hog *hŏchewíchee.*
Hell *Bĕngo-tĕm.*
Help *husker*
Hen *kāni.*
Her *lāki, lātti.*
Here *aký.*
Hide *gavver.*
Hill *chūmba.*
Him *lester.*
Hold *tūl.*
Hole *hĕv.* See window.
Home *kerri* (at home or homeward).
Honey *gudlo*; *gudlo-pĕsham.*
Honeycomb *gudlo-pĕsham.*
Hook *bongo slĭv.*
Hope *kâmmoben* (n.); vb. *kaum.*
Horn *shĭngerballo.*
Horse *gry.*
Horseshoe *pĕtul, chokka.*
Hot *tātto.*
Hour *hora.*
House *kair.*
How *saw.*
How do you do? *Sârishân?*
Hub *putti.*
Hungry *bókkalo.*
Hurry *sĭgger*
Hurt *dukker*
Husband *rŏm.*
I *māndi.*
Ice *shill.*
Ill *nāflo.*
Immediately *kĕnná-sig*; *saw-sig.*
Imprisoned *stardo.*
In *adrée, drée.*
Injure *dukker.*
Iron *saster*; adj. *sasterno.*
Is *se.*
Jail *stáríben.*
Jew *Yahûd.*
Jolly *plochto, mishto.*
Jump *hokker*
Justice of the Peace *pŏknees.*
Keep *tūl.*
Kettle *kāvi, kekāvi.*
Key *klĭsin.*
Kick *ludder*
Kicker *delleméskro.*
Kill *mer mōr, muller.*
King *krâllis.*
Kiss *chūmer*
Knee *chong.*
Kneel *chonger.*
Knife *chūree.*
Know *jĭn.*
Knowledge *jĭnnaben.*
Lad *rāklo, chal.*
Lady *rānee.*
Lame *bongo.*
Lamp *dūd.*
Land *tĕm*; *pūv.*
Language *jĭb.*
Lard *bâllovas.* See bacon.
Large *boro.*
Laugh *savvi.*
Laurel *kovíska-ruk.* See willow.
Lazy *kaulo.*
Lead (metal) *archich.*
Leaf *pâtteran, pâtrin.*
Leather *cham, morchi.*
Leave *muk.* See let.
Leek *pūrum.* See onion.
Left *bongo* (left hand).
Leg *herree.*
Let *muk.*
Letter *lĭl.*
Lick *kŏsher.*
Lie (tell falsehoods) *hūker.*
Lie (n.) *húkerben.*
Lie (lie down) *bĕsh.* See sit.
Life *jĭvvaben.*
Lift *hadder.*
Light *dūd*; adj. *dûdeno* (brilliant).
Lightning *dūdĭkaben, malûna.*
Like (vb.) *kaum.*
Like (prep.) *sĭm, sĭms.*
Lime *lom.*
Little *tāno, tikno, bitto.*

Live *jĭv.*
Living *jĭvvaben.*
Lock *klĭsin* (n.).
Lonely *kŏkkero, akónyo.*
Long *lungo.*
Look *dĭk.*
Loosen *nāsher.*
Lose *nāsher.*
Loud *drovân.*
Louse *jū.*
Lousy *jûvalo.*
Love (vb.) *kaum.*
Love (n.) *kâmmoben.*
Lover *pĭreno*; fem. *pĭreni.*
Low *talley, aláy.*
Luck *bok.*
Mad *dĭvius.* See crazy.
Mad (angry) *húnnalo*; *shûnalo.*
Made *kerro.* See ready.
Magistrate *poknees*
Magpie *kakkarâchi.*
Man *mush*; old form *mânush.*
Manage *tūl,*
Mare *grasnee.*
Marry *rummer.*
Master *ry.*
Me *māndi.*
Meal *habben.*
Meat *habben*; *mas.*
Membrum virile kor.
Mend *tūfer.* See cure.
Middle *masker.*
Midnight *pāsh-rāti.*
Mile *mee.*
Milk *tūd.*
Mind *see, zee.*
Minister *rashy*
Mirror *dĭkkaméngro.*
Money *lŭvvo, wongur.*
Monkey *bómbaros.*
Month *dūd.*
Moon *chōn, shūl, dūd.*
More *kûmee.*
Morning *saula.*
Mother *dy.*
Mother-in-law *stĭfi-dy.*
Mountain *chūmba.*
Mouth *mûee.* See face.
Much *būt, būti.*
Mustard *krĭs.*
My *meero.*
Nail *ny*; *krâfnee.* See button.
Naked *nāngo.*
Name *nav.*
Needle *sĭv.*
Neigh *nucker.*
Never *kĕkker.*
New *nĕvvo.*
Night *rāti.*
Nine *énnea.*
Nipple (breast) *bobbi.*
No *kĕk, kĕkker.*
Noble *buoino.*
Nobody *kĕkno.*
No more *kĕkkūmee.*
None *kĕkno, kĕk.*
Nose *nāk.*
Not *kek.*
Nothing *chichi.*
Now *kĕnná.*
Nut *kor.*
Oath *sóvahaul.*
Oats *jōb, jōv.*
Oh dear *Dordi!*
Old *pūro.*
On *aprée, pre.*
Once *yĕkkorus.*
One *yĕk*
Onion *pūrum.* See leek.
Open *kūder.*
Opposite *pardel, parl.*
Other *wâvver.*
Our *māro* (rare).
Out, out of *avrée, vree.*
Oven *bov.*
Own (adj.) *nōko.*
Pain *duk, dush.*
Pay *pĕssur.*
Pea *bobbi.*
Peaceful *púkkeno.*
Pen *pūr.*
People *fōki.*
Pepper *dantiméngro.*
Perhaps *shýan.*
Person *geero, chal.*
Pewter *mollaúvis.*

Physician *drabéngro.*
Piece *kutter.*
Pig *baulo.*
Pin *spínya.*
Pincers *plaistra*; *tūlaméngri.*
Pipe *swĕgler.*
Piss *mutter.*
Piss-pot *mutterméngri.* See tea.
Pitch *wusser.* See throw.
Pitch a tent *hach a tan.*
Place *tan.*
Play *kĕl.*
Pleased *plochto, mishto, kushto.*
Plough *pūv-wardo.*
Pocket *pōchi, pūtsi.*
Poison *drab, drow.*
Policeman *gav-mush*; *prastermengro.*
Poor *choro, chúvveno.*
Pork *bállovas.*
Pot *kūri.*
Potatoes *pūvéngri.*
Pound (for animals) *pándaben.*
Praise *shōr.*
Pregnant *shůvali.*
Pretty *rínkeno*; fem. *rínkeni.*
Priest *rashy.*
Prison *stáriben.*
Prizefighter *kūroméngro.*
Prophecy *dúkkerin, dúkkerben.*
Prophesy *dukker.*
Proud *buoino.*
Prudent *gúzvero.*
Pudendum feminae minch.
Pull *tāder, tarri, hĭcher.*
Pure *yozho.*
Purse *kĭssi.*
Put *chĭv*; *pĕt.*
Queen *krállisa.*
Quick *sĭg.*
Quiet *púkkeno.*
Rabbit *kānéngro.*
Rag *dĭklo.*
Raven *kakkarách.*
Ready *kĕrro.*
Receive *lĕl.*
Red *lollo.*
Reed *rān.*
Relatives *sĭménsi.*
Remember *repper.*
Residence *bĕshaben, tan.*
Rice *shalee.*
Rich *bárvelo.*
Rick *stoggus.*
Ride *kĭstur.*
Right *kushto.*
Ring *angústro, wóngashee.*
Rip *chĭnger.* See tear.
River *darya, barya, doeyav.*
Road *drom.*
Roar *gūr.*
Rod *ran.*
Rope *dori.*
Round *churro.*
Row (fuss) *chingaree.*
Run *praster.*
Runner *prasterméngro.*
Sack *gunno.*
Saddle *bŏshto, pisáli.*
Sailor *beréngro.*
Saloon *kĭchema.*
Salt *lun.*
Sand *chĭk.*
Say *pĕn, pūker.*
Scamper *hushtee.*
School *lĭléskro kair.*
Scissor-grinder *kātsiméngro.*
Scissors *kātsi.*
Scornful *buoino.*
Sea *barya, darya, doeyav.*
See *dĭk.*
Self *kŏkkero.*
Sell *bĭkin.*
Send *bĭcher.*
Sermon *shůnaben.*
Serpent *sāp.*
Servant *būtiéngro.*
Set *chĭv, pĕt.*
Seven *hefta.*
Sew *sĭv.*
Shade *tam.*
Shady *tamlo.*
Shame *laj.*
Share *bānder.*
She *yoi, lāki, lātti.*
Sheep *bŏkro.* See goat.

Shindy *chingaree.*
Shining *rûzheno.*
Ship *beero.*
Shirt *gad.*
Shit *fūl* (n.) Vb. *kair fūl.*
Shoe *chokka.*
Shoot *pūder.*
Shout *shell, shokker.*
Show *sĭkker.*
Shut *pānder.*
Sick *nāflo.*
Side *rĭk, rĭkkorus.*
Sight *dĭkkaben.*
Sign *pâtteran.*
Silk *kushno.*
Silver *rup.*
Silvern *rûppeno.*
Sin *wâfroben.*
Sing *gĭlli.*
Sister *pĕn.*
Sit *bĕsh.*
Six *shov.*
Sleep *sŏv.*
Sleeve *by. byáskro.*
Slow *pukkeno.*
Small *tāno, tikno, bitto.*
Smallpox *bugnee.*
Smash *pŏgger*
Smell *sūm* (vb.).
Smell (n.) *sûmaben.*
Smile *savvi.* See laugh.
Smith *pĕtuléngro.*
Smoke (vb.) *tūv.*
Smoke (n.) *kessur.*
Smother *tasser.*
Snail *bawris.*
Snake *sāp.*
Snow *yĭv.*
Soldier *kūroméngro.*
Someone *chûmano.*
Something *chûmanis, vâniso.*
Son *chāvo.*
Song *gĭlli.*
Soon *sĭg.*
Sorrow *dush.*
Sorry *sûkaro.*
Soul *see, zee.*
Soup *sĭmmun.*
Sour *shūto.*
Spark *chìngar.*
Speak *rāker.*
Spectacles *yākéngri.*
Spider *pūv-sūver.*
Spirit *duk.*
Spit *chunger* (vb.).
Spittle *chungerben.*
Spoon *roi.*
Sport *pýas.*
Spur *búsaha.*
Squirrel *rukestaméngro.*
Stable *stānya.*
Stair *padras portus.*
Stallion *pĕléngro gry.*
Stay *hāch.*
Steal *chor.*
Step-mother *stĭfi-dy.*
Stick *kŏsht.*
Stil *pûkkeno.*
Stink *kaun* (vb).
Stinking *kaunlo.*
Stocking *hŏvalo.*
Stomach *buk.*
Stone *bar.*
Stop *hāch.*
Story *gudlo.*
Stove *bov.*
Straight *tardo.*
Straw *pus.*
Street *drom.*
Strike *kūr.*
Strong *surrelo, sasto.*
Suffocate *tasser.*
Sugar *gudlo.*
Suitor *pĭreno.*
Summer *bĭlli.*
Sun *kan, kam.*
Sunday *Kúrrikus.* See week.
Surprise (n.) *tūb.*
Surprised *dree tūb.*
Swear *sŏvahaul.*
Sweet *gudlo.*
Swim *sūv.*
Swine *baulo.*
Table *mĭssali.*
Tail *poris.*
Take *lĕl.*

Tale *gudlo.*
Tavern *kĭchema.*
Tea *mutterméngri.*
Tear *chinger*
Tell *pen, pūker.*
Ten *dĕsh.*
Tent *tan.*
Testicles *pĕlĕ.*
Thank you *párrako tūte.*
That (pron.) *adóvo, dovo.*
Thee *tūte.*
Their *lendes.*
Them *lende.*
There *adói.*
They *lende.*
Thief *chōroméngro.*
Thing *kóvva*; *pénnis.*
Think *pĕn.*
Thirsty *trūshilo.*
This *akóvo, kovo.*
Thorn *kāro.*
Thou *tûté.*
Three *trin.*
Throat *gullo.*
Throw *wusser.*
Thunder *godlee*; *malûnā.* See ightning.
Thy *teero*
Time *cherus.*
Tired *kinlo.*
Tobacco *tûvalo.*
To-day *to-divvus.*
Together *kĕttenus.*
To-morrow *to-sáula.*
Tongue *jĭb, chĭb.* See language.
To-night *to-rāti.*
Tooth *dant.*
Towel *plashta.*
Town *gāv.* See village.
Track *pâtteran.*
Trail *pâtteran.*
Travel *pĭrri*; *jaw dūro* 'go far.'
Tree *ruk.*
Trick *hukerben.*
Trouble *tukli, tugnus, dush.*
Trousers *rokámyas.*
True *chācho, tācho.*
Truth *tāchoben, chāchoben.*
Turn *rikker.* See bring, carry.
Twenty *bìsh* (rare).
Two *dûee.*
Uncle *kōko.* See cousin.
Under *talley, alây.*
Understand *jĭn.*
Understanding *jĭnnaben.*
Universe *chollo-tĕm.*
Upon *aprĕe pre.*
Urinal *mutterméngri.* See tea.
Urinate *mutter*
Urine *mutterben.*
Use *chĭv.* See put.
Used *kâmmoben*; wrongly employed as adj.
Very *būt, būtti.*
Village *gāv.*
Vinegar *shūt.*
Violent *drovân.*
Violin *bŏsh*
Violinist *bòshoméngro.*
Vulgar *fŏkéskro.*
Wagon *wardo.*
Waistcoat *vongree.*
Wait *hāch.*
Wake *jonger.*
Walk *pĭrri, jaw.*
Warm *tātto.*
Was *sus.*
Wash *tōv.*
Watch (vb.) *dĭk.*
Watch *hora* (noun).
Water *pānee.*
Watercloset *pânee-kair.*
Wax *mŏm.*
Wax-light *mŏmeli dūd.*
Way *drom.*
Wear *rĭv* (as clothes).
Wedding *rúmmerben.*
Week *kúrrikus.* See Sunday.
Weep *rov, row.*
What *so.*
What is *sosse.*
Wheat *gĭv.* See grain.
Wheel *herree.*
When *vonka* (rare).
Where *ky.*
Whinney *nucker.*

Whip *chuknee.*
Whiskey *tātto-pānee.* See brandy.
Whistle *shell.*
White *pauno.*
Who *savo, kun.*
Whore *lûbeni.*
Widow *pĭvli jûva.*
Widower *pĭvlo mush.*
Wife *rŏmni.*
Wild *wĕshno*; *dĭvius* (see crazy).
Willow *kovâska-ruk*; *kĭpsi-ruk.* See laurel.
Wind *bavól.*
Wine *mol.*
Winter *wĕn.*
Wise *gúzvero.*
Wish *kaum.*
Witch *chōvihânee.*
With *pāsh*; *'long o'*
Wizard *chōvihâno.*
Woman *jūva.*
Womb *dūdum.* See gourd.
Wood *kŏshi*; *wesh* (see forest).
Wool *poshom.*
Word *lāv.*
Work *būti.*
World *swĕti.*
Worm *nāg.*
Worry *nĭcher.*
Write *chĭn.* See cut.
Writing *lĭl.*
Year *bĕsh.*
Yes *ăvali, ăvo.*
Yesterday *kâliko.*
You *tûté.*
Young *tāno, tĭkno, chĭkno.*
Young girl *rāklĭ, chy.*
Young man *rāklo, chal.*
Your *teero* (rare); *tūtes.*

Visiting Sins upon the Innocent.—By DR. THEODORE C. FOOTE, of the Johns Hopkins University, Baltimore, Md.

BIBLIOGRAPHY (*cited by author's name*).

Bühler	Grundriss der Indo-arischen Philologie.
Duschak	Das Mosaisch-Talmudische Strafrecht, 1869.
Förster	Das Mosaische Strafretcht, 1900.
Kleineidam	Die Personalexekution der Zwölftafeln, 1904.
Mitteis	Reichsrecht und Volksrecht, 1891.
Mommsen	Zum ältesten Strafrecht der Kulturvölker, 1905, including replies to "Fragen zur Rechtsvergleichung," by Nöldeke and Wellhausen.
Müller, D. Heinr.	Die Gesetze Hammurabis, 1903.
Post	Grundriss der ethnologischen Jurisprudenz, I. II. 1894–95.
Rapaport	Zeitschrift für Vergleichende Rechtswissenschaft, 16ter Band, 1903.
Saalschütz	Das Mosaische Recht, 1853.
Swoboda	Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, 26ter Band, 1905.

EVERY one is aware that the devout belief of Christendom until recent times has been that the innocent are punished by God for the sins of their ancestors. It is true that a way has been found of ameliorating the injustice by confining the visitation to hereditary ills, but this is modern. The great prominence that has been given to this belief is no doubt due to its expression in the second commandment of the Decalogue, which, strangely enough and quite significantly, has produced a much more marked impression on Christianity than it ever did upon Judaism.

It is my intention to treat this subject from a comparative and not a theological standpoint, and to call attention to a remarkable instance of a more advanced ethical concept yielding to an inferior one which thereupon dominates the subject for nearly twenty-five centuries.

The first mention of the innocent suffering for the guilty in Hebrew literature is found in Deut. 24, 16: "The fathers shall not be put to death for the children, neither shall the children be put to death for the fathers: every man shall be put to death for his own sin."

Such a statute as this in an ancient code can hardly be without a history, which we have, unfortunately, little means of learning. It seems evident, however, that the Hebrews had encountered some custom of punishing the innocent with or for the guilty, and this clean-cut statement that "every man shall be put to death for his own sin," is the protest of a legislator whose ethical standard was far more just.

It may be taken for granted that the responsibility[1] (rechtsverantwortlichkeit) of the family or clan, of which Post cites so many instances among primitive peoples, obtained among the Canaanites of Palestine. Post says:[2] "Die Haftung des Geschlechts für Rechtsbrüche seiner Genossen ist eine ganz universelle Erscheinung." He then cites authorities on the peoples of the Malay Archipelago, Polynesia, Mariana Islands, of the Caucasus, the Semites, Negroes, and various Aryan peoples.

We may then infer that among the Canaanites the primitive bloodfeud, which amounted to a state of war between different clans, passed, as among other peoples, into the blood revenge,[3] which limited not only the causes that justified such revenge but also the persons who were allowed to participate in it. Müller points out[4] that the Hammurabi code and the Sepher Hammishpatim, the so-called Book of the Covenant, both of which in his opinion depend on an older parent code, recognize the principle that the children are penally responsible (strafrechtlich verantwortlich) for the crime of their parents. In the Babylonian code this is a right, which in the Hebrew code is abrogated.[5] It may be noted here that all the books I have seen dealing with Hebrew penal laws and ethnological jurisprudence know nothing of Biblical criticism and cannot treat the facts chronologically.

The passing of the blood revenge into the lex talionis[6] was no doubt the removal of a terrible menace to life and liberty to many persons related to the guilty party, but at the same time it was probably not remarked that this movement towards mitigation of the harsher custom, worked a shocking cruelty in the case of innocent persons dying for the guilty. In most cases, it

---

[1] Saalschütz, p. 445.
[2] Post, II, p. 225 f.
[3] Nöldeke in Mommsen, p. 82 ff.
[4] Müller, p. 168.
[5] Müller, p. 165 ff.
[6] Müller, p. 227, pp. 222 ff.

may be hoped, the penalty was reduced to a fine.[1] There is probably little doubt that § 210 of the Hammurabi code,[2] which directs that in case a man has caused the death of a gentleman's daughter, his own daughter shall be put to death, was subject to composition; and the same may be said of § 230, where a builder's son is to be killed in case a house of the said builder falls and kills the owner's son. But nevertheless the principle of the substitution of the innocent for the guilty is plainly recognized.

This principle may also be traced in Ex. 21, 31.[3] If a man's ox, known to be vicious, has killed a man or a woman, the owner's life is forfeited; but composition in the form of a ransom is allowed. Then vs. 31 reads: "Whether it have gored a son or have gored a daughter, according to this judgment shall it be done unto him"; which seems to imply that by some well known custom the owner's son or daughter would be forfeited; but this was not permitted among the Hebrews because a child cannot be put to death for a father. In the Hammurabi code[4] the substitution of an undeveloped child or a useless old father, in case a man had killed a child or a father, was a softening of the harsher law requiring the death of the guilty person.

So far as I am aware, this is all that can be discovered of the penal laws of the Semites before the time of Deuteronomy.

The question now is, where are we to find the historical background for the statute in Deut. 24, 16: "The fathers shall not be put to death for the children, neither shall the children be put to death for the fathers; every man shall be put to death for his own sin."

On first thought it might seem to connect itself with the provision just referred to in the Hammurabi code allowing the substitution of a father or child for the guilty party, which would thus associate it with the lex talionis. But fortunately we have an interesting application of this law in 2 Ki. 14, 6, which seems to point to the period when blood revenge was the ruling penal principle and against which the Deuteronomic statute was directed.[5] Amaziah, son of Joash, king of Judah, when well

---

[1] Wellhausen in Mommsen, p. 91 ff. [2] Müller, p. 152.
[3] Müller, p. 168. [4] Müller, p. 226.
[5] Post II, p. 396 f.

established on the throne, put to death those of his subjects who had been guilty of the murder of his father, king Joash; but it especially noted that he did not kill the children of the murderers, because it was forbidden in the Book of the law of Moses, and the statute is then quoted. This is, of course, due to the Deuteronomic editor of the Books of Kings, and shows us that the idea of the statute was not to oppose a custom of substitution of children for fathers or fathers for children, but the right which was sanctioned by blood revenge, of exterminating the whole family of the guilty party. Saalschütz says:[1] "It was something quite common among ancient peoples, to punish not only the children but also the other relatives of the guilty party." He goes on to quote Potter on Grecian laws to the effect that this was done in case of political offenders in order to secure the state against traitors.[2] Instances of this motive as seen in Israelitish history will doubtless be called to mind. This explanation, however, does not apply in the case of the Deuteronomic statute, for the provision plainly rests on the ethical ground that it is intolerable to cause the innocent to suffer with the guilty. Nor is it to be explained by the idea of the scapegoat, nor is it a reaction against the excesses of personal revenge (cf. 2 Sa. 3, 28 f.).[3] I find no other reason for the blood revenge being visited on the family of the transgressor than that of the solidarity of the related parties. There seems to have been an idea of infection which rendered it necessary to exterminate all those who were regarded as infected. However it may be explained, it is against this idea that any one else than the guilty one can be held guilty *because of blood relationship*, that the Deuteronomic statute was framed.

This principle, then, that the innocent shall not suffer for the guilty, which Duschak[4] considers to be the foundation of Hebrew law, we find unequivocally stated as early as 621 B.C.

---

[1] Saalschütz, p. 445, and Potter, there referred to. See also: The *nexum* among Romans and Greeks. Kleineidam, pp. 52, 64. Mitteis, p. 358 ff. In Talmud, Rapaport § 16. Obligations for debt in India, Bühler, pp. 99, 147. For Greece, Swoboda, p. 214. Among primitive folk, Post, I, p. 365.

[2] Post, II, p. 323.

[3] Förster, p. 30.

[4] Duschak, p. 5.

It would be a great mistake, however, if we concluded that the promulgation of such a highly ethical statute was equivalent to the disappearance of the opposite view. The influence of the surrounding nations, on the contrary, continued to make itself felt on the Hebrew people. Instances, such as the murder of Naboth's children by the Tyrian Jezebel,[1] were probably not of infrequent occurrence, and the tendency was to bring into existence a proverbial expression of the principle that the innocent were answerable for the guilty: "The fathers have eaten sour grapes and the children's teeth are set on edge." An expression well adapted to convey the idea of sin infection among blood relatives.

But Jeremiah[2] (about 606 B.C.) takes his stand firmly on the Deuteronomic statute and looks forward to the day when the abhorrent doctrine should no more be heard. "In those days, they shall say no more, The fathers have eaten sour grapes and the children's teeth are set on edge. But every one shall die for his own iniquity; every man that eateth sour grapes, his teeth shall be set on edge."

The prophet Ezekiel, a dozen or more years later, utters a vigorous protest against the same doctrine, which had apparently gained strength through foreign influence. It is from him we learn that the doctrine is a foreign one and has no right to a place in Israel. "What do you mean," he indignantly exclaims, "by using this sour grape proverb *on Israelitish soil* (על אדמת ישראל)[3]?" And Lord JHVH declares with an oath that this proverb should no more be used in Israel. The prophet then proceeds to teach the Deuteronomic statute, "The soul that sinneth it shall die; the son shall not bear the iniquity of the father, neither shall the father bear the iniquity of the son."[4]

Before we pass to the consideration of the postexilic teaching on this subject, we must examine two passages which belong to the older history of J and E, both of which seem to include the punishment of the innocent with the guilty. There are other references which are usually given on this subject

---

[1] 2 Ki. 9, 26; see Saalschütz, p. 446.
[2] Jer. 31, 29 f.
[3] Cf. Ps. 137, 4, Is. 32, 13, Jer. 23, 8, Ezek. 12, 22.
[4] Ezek. 18, 2, 3, 20.

that are not really pertinent, and will be treated in a note.[1] The two passages are the account of the vengeance on Korah, Dathan and Abiram in Num. 16, and on Achan in Josh. 7. In the latter case many explanations have been given to eliminate the injustice of Achan's family perishing with him.[2] Michaelis believes the children had sinned with the father; others, that they were only brought out to witness but not to share the execution. Maimonides (zu Sanhedrin, vi. 2), points out that Joshua's action against Achan was exceptional, since none should be condemned to death in consequence of his own confession or the declaration of a prophet. But it is not necessary to explain away difficulties which exist only as the result of later scribal expansion. It has been pointed out by Holzinger *in loco* that these additions in vv. 15 and 24 which include Achan's family, are inconsistent with the narrative in vs. 26, and are to be rejected. It may be noted that just such an expansion is to be found in Lev. **20**, 5, which reads: "I will set my face against that man, and against his family, and will cut him off," etc.; where, as Bertholet has pointed out, "against his family" is a later addition. In the case of Korah, all the documents appear to narrate the destruction of the families, but here again the impression is due to just such expansions as are noted above. But if it were not due to later expansions, it is not strange that there should be, in the earliest traditions, some traces of the belief against which the Deuteronomic statute is evidently a protest.[3]

From the passages thus far considered it is clear that the only teaching that had any right in Israel was the Deuteronomic statute, and the contrary teaching is recognized as foreign and repudiated in the most unequivocal manner in the name of God himself.

---

[1] Several other passages, usually thought to refer to this subject, but really not pertinent, are as follows: In Lev. **20**, 5, "against his family" is a gloss. Some passages refer to the guilt of the person punished, e. g. Lev. **26**, 39 f., Ps. **79**, 8 (read "former sins"), Ps. **109**, 14. In Num. **14**, 33, the reference is not to punishment. Job **5**, 4, is not God's visiting. 1 Ki. **21**, 29, seems to be an alteration due to the actual facts of the history. Jer. **11**, 22, taken in connection with **31**, 29 f., shows a coloring due to the late date of editing. See Cheyne, Black, E. B. col. 2377.

[2] Saalschütz, p. 445 f. Duschak, p. 5.

[3] Förster, p. 30.

It remains to consider the passages bearing on this subject which show the trend of postexilic thought. We find that instead of the *fulfilment* of the prophecies of Jeremiah and Ezekiel, that the high ethical standard of the Deuteronomic statute would prevail over the lower standard of the surrounding nations, the very opposite happened; and we have an instance, which, as far as I know, is unique,[1] of a people who had adopted an advanced ethical principle and had been taught by two great prophets, speaking in the divine name, that the eternal Justice could not abide that the innocent should be punished for the guilty, yet who nullified their own legislation and adopted a foreign standard setting forth in the most solemn manner that the sins of the fathers would be visited on the children unto the third and fourth generation.[2] And what seems the more strange is that writers of the same Deuteronomic school, whose thought and literary expression are so familiar, should have become thorough converts to this doctrine and have interpolated into the earlier Scriptures, in at least four places, statements diametrically opposed to the Deuteronomic statute. I refer to the interpolations in the second commandment, Ex. 20, 5, Deut. 5, 9, and virtually the same words in Ex. 34, 7, and Num. 14, 18. The date of this revision we do not know, but it probably belongs to the period of the postexilic or second Deuteronomic editing of the Book of Kings."[3]

The growth of this sentiment in prophetic literature seems to have begun at the close of the Exile. In Is. 14, 21, a passage that belongs to this period, in the triumph over Babylon, occur the words, "Prepare ye slaughter for the children for the iniquity of their fathers," a wording which recalls the Deuteronomic statute at the same time that it reverses its sentiment. This can hardly be anything but the conscious adoption of a

---

[1] Westermarck in The History of Human Marriage, p. 68, gives instances of barbarous tribes retrograding in morals on contact with higher civilization. This is not parallel, but it suggests a possible reason for the back step of the Jews.

[2] Saalschütz, p. 446 f. The Rabbis apply the clause "that hate me" to the children. The fathers set a bad example which the children followed. But this clause is wanting in Ex. 34, 7, and Num. 14, 18, also in Is. 14, 21, and Lam. 5, 7.

[3] See Burney, Hebrew Text of Kings, Introduction.

different ethical principle. A passage in Is. 65, 6 f., though not very clear, seems to breathe the same spirit. In Lam. 5, 7, which is not earlier than 470 B.C., we find the couplet, "Our fathers sinned and are not, and we have borne their iniquities." The sentiment is that of the second commandment.

Finally in Jeremiah 32, 18, about the time of Hyrcanus, we find JHVH appealed to as one who "recompenseth the iniquity of the fathers into the bosom of their children after them." A passage amply significant of the remarkable ethical change when compared with the true Jeremiah: "In those days they shall no more say, The fathers have eaten sour grapes and the children's teeth are set on edge."

The facts then are these. In the earlier times the influence of primitive modes of thought in the Hebrew people themselves, or the effect of contact with surrounding nations, may have led to instances of blood revenge of which the Song of Lamech may be an echo, and the rather uncertain account of the vengeance on Korah, Dathan and Abiram. But a healthier sentiment made itself felt in the time of Deuteronomy in a vigorous protest against the visiting of fathers' sins upon children or children's sins upon fathers; and the just statute that every one should die for his own sins became the basis of Hebrew penal law. The contrary opinion, however, refused to die[1] and is sternly repudiated by Jeremiah and Ezekiel and stamped as un-Israelitish. By the close of the captivity, nevertheless, the lower standard prevailed, it may be through Babylonian influence, and only a trace[2] is afterwards to be found of the early Deuteronomic legislation.

The later Jews seem to have developed still further the idea of sin infection, which may have been originally associated with blood revenge, and in the latest Books the belief in inherited sin as a result of Adam's[3] disobedience paved the way for the Christian doctrine of original sin.

---

[1] We may infer from this that the Deuteronomic legislation failed to influence or represent the popular thought.

[2] Perhaps such may be seen in the quoting of Deut. 24, 16, in 2 Chron. 25, 4, and Job 21, 19 (in the Persian period?) shows a similar survival.

[3] 1 Esdras, 8, 21.

Metrical Analysis of the Pāli Iti-vuttaka, a Collection of Discourses of Buddha.—By JUSTIN HARTLEY MOORE, A.M., Columbia University, New York.

IN working upon a translation of the Ita-vuttaka, sometimes called the Logia-book of Buddha, it occurred to me that a study of the meters of the metrical portions might perhaps yield something of value as regards both the age of the work and the authenticity of some of its doubtful passages. In this hope I was largely disappointed. But although no satisfactory clue as to the date of the work has been given by this metrical analysis, yet it is possible that further similar examination of other books of the Buddhist canon may permit us to assign to each its proper relative date.

More definite and satisfactory results, however, were obtained, when it came to making a threefold comparison of the Pāli meters with those of the Veda, the epics, and the later classical forms. For comparison with the Vedic meters, I have made use of Arnold, *Vedic Metre*, Cambridge, 1905, and have employed such of his terminology as was needed; for the Sanskrit meters I have relied on Hopkins' *Great Epic of India*, N. Y., 1901, pp. 191–362; and for Pāli upon the articles of Oldenberg and Simon mentioned below.

The text of the Ita-vuttaka which I have used is that of Windisch, published by the Pāli Text Society of London in 1890, and in comparison with this I have collated the King of Siam's edition of the work in Siamese characters. The Iti-vuttaka is composed of one hundred and twelve sections, each of which consists of a poetical discourse or saying by Buddha (these poetical passages contain from four to thirty verses) and of a prose introduction.

Three meters are used, śloka, triṣṭubh, and jagatī. Of these I shall examine more particularly the first, the śloka, which is the most frequent and most important. The large Arabic numbers used in citing various lines of the work refer to the various sections, and the small letters, a, b, c, etc., to the verses of these sections.

Śloka.—There are in Pāli, as in Sanskrit, two kinds of śloka-stanza: first, the śloka proper or distich, of four pādas (the

pāda being octosyllabic), and second, the much less common mahāpañkti or tristich of six pādas. As the same laws of caesura and rhythm apply to each, I include the two varieties in the metrical tables below.

Feet.—Every distich stanza has a well-marked division or caesura at the end of the second pāda, so that the stanza falls naturally into two halves. Each pāda may be divided into two feet of four syllables each. As no metrical difference between the two halves of the stanza exists, there are really not eight different feet, but four. With regard to the six-line śloka, or mahāpañkti, the stanza is divided into three equal parts, mutually independent as to rhythm. The opening feet of the first, third and fifth pādas may be called first feet.

Syntactical union.—Although there be this metrical isolation of successive verse-couplets, there is very frequently a syntactical union of each pāda with the one following. In fact, we occasionally find two stanzas forming a single sentence.

Caesura.—The cadence of the śloka naturally depends largely on the sense. It is invariable in the Iti-vuttaka that there be a strong caesura at the end of the second pāda, and also caesuras, somewhat weaker, at the close of the first and third pādas, but still strong enough to prevent the lines being run together. It is found, also, that when the second foot is of the form – – – ⏑ there is usually a caesura within the pāda itself, after the fifth syllable. Out of twenty-four instances there are but two exceptions (51 i, 77 a). Hopkins notes the same rule in epic Sanskrit (op. cit., p. 221).

Run-on verses.—In Sanskrit one pāda is somtimes merged with the following in such a manner that the two are inseparable at the end of a line. This is usually the case when a long list of objects is cited, as noted by Hopkins, page 196, but in the Iti-vuttaka such a running together of lines never occurs.

Hiatus and Rhyme.—Hiatus is found everywhere. This is partly due to the absence of the application of such rules of sandhi as are carried through in Sanskrit; it is partly owing to the structure of the Pāli language, which is characterized by an avoidance of final consonants. Rhyme, which according to Hopkins (p. 200) is not uncommon in epic Sanskrit, is non-existent in the Iti-vuttaka. Alliteration is rare and is probably largely unconscious and accidental. A marked alliterative

effect is found in § 90, an interesting jingle, where in the course of sixteen lines the word *agga* is used eleven times, with more than one meaning.

At this particular point in our investigation of the śloka, before going into the varieties of feet, I wish to acknowledge in a more especial way my indebtedness to two articles in ZDMG., the first by Oldenberg, vol. 35, pp. 181–188, entitled *Bemerkungen zur Theorie des Śloka*, and the other by Simon, vol. 44, pp. 83–97, entitled *Der Śloka in Pāli.* While both papers are very suggestive, the latter was especially valuable for my purpose, based as it is upon a quantitative analysis of the 725 verses of the Dhammapada, 2622 from the Thera-Therī-gathā, and 2430 chosen from the Jātakas. In analyzing the meters of the Iti-vuttaka I have followed Simon's method in all respects, except that I have treated the eighth syllable of each line as anceps, since Simon's tables themselves show an equal frequency of long and short syllables, and since this eighth has no effect on the character of the rhythm.

Odd Pādas. I append herewith an analytical table of the first and second feet of the odd pādas; in this table hypermetric feet are not included, but will be treated separately. The even pādas will be tabulated and described later.

Forms of First and Second Feet, or varieties of Odd Pādas.

1st foot. \ 2nd foot.	⏑ – – –	⏑ – ⏑ ⏑	⏑ ⏑ – ⏑	⏑ ⏑ ⏑ ⏑	⏑ – – –	⏑ – ⏑ ⏑	⏑ ⏑ – –	⏑ ⏑ ⏑ –		
– – ⏑ –	43	24	12	2	1	2	1		85	245
– ⏑ – –	75	4	1	3	4	1	4		92	
– – – –	59	2	4		2	1			68	
⏑ – ⏑ –	14	6	7		3				30	89
⏑ ⏑ – –	17								17	
⏑ – – –	37		1	2	2				42	
– ⏑ – ⏑	33	2			1	3			39	90
– – – ⏑	18	1				3			22	
– – ⏑ ⏑	25	1	2			1			29	
⏑ – – ⏑	32				1	1			34	74
⏑ ⏑ – ⏑	13					1			14	
⏑ – ⏑ ⏑	22	1			1		2		26	
– ⏑ ⏑ –	3							3	6	
– ⏑ ⏑ ⏑	1								1	
⏑ ⏑ ⏑ –	1							1	2	
⏑ ⏑ ⏑ ⏑	2								2	
	395	41	27	7	15	13	7	4	509	

Some little explanation is necessary before making comment on this table. Two consonants, as well as a *niggahīta* (Skt. anusvāra) followed by a consonant, make a syllable heavy (Henry, *Grammaire Palie*, p. 3) or long by position. Wherever, in lines which at first glance appear hypermetric, a word containing an anaptyctic or svarabhaktic vowel occurs, this vowel is naturally disregarded in the analysis, and the line is treated as regular, e. g. *ariya* is analysed as a trochee. No catalectic lines occur, and hypercatalectic lines will be found treated in another section of this paper.

An examination of the foregoing table of different combinations of syllables in the odd pādas reveals many things of interest. There are sixteen possible combinations of the four syllables of the first foot, and eight of the second foot. Although there be this large number of possible combinations, it will, nevertheless, be seen that there is a marked preference for certain particular combinations of long and short syllables. Among the more marked of these peculiarities may be cited the following:—(a) If the fourth syllable is short, the fifth must usually be short also. In the Iti-v. and Jātaka a short fifth is 16 times as common as a long, in the Thera-therī-gathā, 23 times, and in the Dhammapada, 40 times as common.

(b) A succession of four iambs is very rare, there being no instances in Dhp., 3 in Iti-v., 4 in Thera-Th., and 6 in Jāt.

(c) Even three iambs are uncommon in proportion to the number of lines, since there is only about 3% of such succession in the Iti-v., and only 4% in the other works.

(d) A succession of four trochees is very rare, there being none in Dhp. or Thera-Th., one in Iti-v., and two in Jāt. A succession of three trochees is almost equally uncommon; the Iti-v. and Thera-Th. have each one instance; the Dhp. has none; the Jāt. eight.

(e) It appears from the table, furthermore, that if the sixth and seventh syllables of a verse are either both long or both short, the fifth syllable is then usually of a different quantity. In this respect the four works stand in a regular sequence as regards the proportionate frequency of a different quantity in the fifth foot. In the Iti-v. the fifth syllable as a different quantity from the sixth and seventh, whether both of those syllables be long or whether they be short, is nine times as frequent; in

the other works the proportions are respectively Dhp. 8–1, Thera-Th. 7–1, Jāt. 6–1. The Iti-v., therefore, has the strongest proneness thus to differentiate the fifth syllable, the Jātaka the weakest.

Rare Vipulās.—As to the vipulās, or second feet, we may first dismiss briefly the least common ones of the odd pādas, viz., the third pæon or ionic a minore, ∪ ∪ – ∪̲, the second pæon or diiambus, ∪ – ∪ ∪̲, and the ionic a maiore or third epitrite, – – ∪ ∪̲. In Sanskrit, for example, the first of these occurs sporadically in all parts of the Mahābhārata, but is not found in the Rāmāyaṇa. The same foot forms about 2% of the second feet in the Iti-vuttaka. The next close ∪ – ∪ ∪̲ does not often occur in the epic śloka, and in Pāli it is very rare. The use of this vipulā more than anything else separates and distinguishes Pāli meter from the anuṣṭubh of the Veda, and the meter of the later Rig-Veda, which Arnold calls the epic anuṣṭubh. In anuṣṭubh it is the most common foot, forming the ending of the first and second pādas indifferently. Its use as a close to the first (or third) pāda sinks in epic anuṣṭubh to one-half the frequency, and in Pāli and epic Sanskrit its employment is sporadic. With reference to the next vipulā, – – ∪ ∪̲, we find that in the Pāli śloka it has an average occurrence of one-half of a per cent., about the same frequency in anuṣṭubh, is sporadic in the epic śloka, but in epic anuṣṭubh it forms 8% of the second feet.

The most common vipulā. The most frequently used second foot in Pāli is ∪ – – ∪̲. It forms in the Iti-v., Dhp. and Thera-Th. about 80%, in the Jāt. about 70% of the endings of the first pāda. In the epic Sanskrit, it is also the prevalent ending, but in anuṣṭubh has but a frequency of one per cent. In all four Pāli works this vipulā is used oftenest with the first group of openings, or first feet, as shown in the table. The percentages of the use of this particular vipulā with the first group are Iti-v. 40%, Dhp. 41%, Thera-Th. 40%, Jāt. 36%.

Other vipulās.—The next popular vipulā is the form – – – ∪̲, which most commonly follows a third epitrite – – ∪ –, in the first foot. It is slightly more than half as common as ∪ – – ∪̲ after this opening, in the Iti-v., and slightly less than half as common in Thera-Th. and Jāt., but in the Dhp. only one-fifth as common. This vipulā forms less than one per cent. of the

second feet in anuṣṭubh, about five per cent. in epic anuṣṭubh, but in epic śloka is fairly frequent. As to the vipulā – ⏑ ⏑ ⏒, it is usually preceded by a diiambic or third epitritic opening ⏒ – ⏑ –. The third epitrite is the more common.

Opening feet.—With regard next to the first feet of the odd pādas, there exists much greater freedom than in the second feet. As said before, there are sixteen variations, and it is noteworthy that at least one example of each is found in the comparatively small compass of the Iti-v. The foot ⏑ ⏑ ⏑ ⏑ does not occur at all in the other works, and the varieties – ⏑ ⏑ ⏑ and ⏑ ⏑ ⏑ – are not in the Dhp.

The most common group of first feet in all four works is the first group, – – ⏑ –, – ⏑ – –, – – – –. Insignificant are differences in the four works as to which one of these is the favorite. Thus in Iti-v. and Thera-Th. the second epitrite, – ⏑ – –, is of slightly greater frequency, while in Dhp. and Jāt. the third epitrite, – – ⏑ –, is a little in excess.

The second group of opening feet, ⏑ – ⏑ –, ⏑ ⏑ – –, ⏑ – – –, differs from the former group in having the initial syllable short, and we notice that this difference has a marked effect on the frequency of the opening, as is shown by the figures in the table. This preference for a long first syllable is much stronger in Iti-v. than in the other three works. An interesting contrast may be made here between the Pāli śloka and the Vedic anuṣṭubh. In the latter the first syllable is anceps, whereas in Pāli, on examining all the sixteen varieties of openings, we find that a long first syllable is about twice as common as a short.

The next two groups of opening feet agree in having a short fourth syllable, and it has already been said that when such is the case, the fifth is usually short also.

Lanman, *Sanskrit Reader*, p. 300, states that in the Sanskrit epic śloka, the syllables 2, 3 and 4 in odd pādas may not have the form of an anapaest, ⏑ ⏑ –, or a tribrach, ⏑ ⏑ ⏑. In general this is true also in Pāli, but it is not invariable, since there are 11 examples of ⏑ ⏑ ⏒ for the second, third and fourth syllables in the Iti-v., 13 in Dhp, 73 in Thera-Th., and 47 in Jāt.

Even Pādas.—Turning now from the odd to the even pādas, we at once notice a remarkable difference in the character of the second foot, since it is here almost invariably of the form ⏑ – ⏑ ⏒. In the Iti-v. among 519 feet, only eight have not this

diiambic close ; these eight verses are 15b, 18d, 20d, 20f, 73b, 75r, 85d, 105b.

The number of hypermetric even pādas is smaller than in odd pādas, since there are 12 hypermetric verses in even pādas in Iti-v. as compared with 24 in odd pādas. These hypermetric lines will be treated later.

The opening foot of the even pādas is variable, although not so greatly as the opening foot of the odd pādas. I subjoin an analysis of the varieties of third foot in the Iti-v.

Table of third feet, or openings of even pādas.

Group I.				*Group* III.		
– – – –	110	210	294	– – ⏑ ⏑	40	59
– ⏑ – –	100			⏑ – ⏑ ⏑	10	
⏑ – – –	61	84		– ⏑ ⏑ ⏑	9	
⏑ ⏑ – –	23			⏑ ⏑ ⏑ ⏑	0	
Group II.				*Group* IV.		
– – – ⏑	51	157		– – ⏑ –	4	9
– ⏑ – ⏑	53			– ⏑ ⏑ –	4	
⏑ – – ⏑	38			⏑ – ⏑ –	0	
⏑ ⏑ – ⏑	15			⏑ ⏑ ⏑ –	1	

A comparison of this table with the similar one in Simon's analysis of the other three Pāli works (p. 93), shows that the first group, in which all four feet agree in having a long third and fourth syllable, contains more than one-half the number of third feet in the Pāli śloka. The first syllable is more than twice as often long as short. The second syllable is anceps, with a slight predominance of longs, the longs being proportionately more common in the Iti-v. than in the other three works.

The second group differs from the first in having the last syllable short. There is a preference again here for a long first syllable ; the second is anceps, the long quantity being more numerous.

When the third and fourth syllables are short, as in group three, the second syllable is then long ; there are but thirty-three exceptions to this rule in all of the four Pāli works combined, a total of 6422 lines.

Certain special rules as regards even pādas may be discovered from the above table, as for example the absence of a succession

of four iambs in the Iti-v. There are, however, three instances of this succession of syllables in the Dhp.; twelve in the Thera-Th.; and twenty-one in the Jāt. Three iambs in succession are also rather uncommon; of this there are nine instances in the Iti-v., twelve in the Dhp., forty-three in the Thera-Th., and seventy-one in the Jāt.

In the epic śloka (Lanman, *Sanskrit Reader*, page 300) syllables 2, 3 and 4 of even pādas cannot form a tribrach, ⏑ ⏑ ⏑, an anapaest, ⏑ ⏑ –, or amphimacer, – ⏑ – . Such is not the case in Pāli, since the Iti-v. has nine examples of the tribrach, the Dhp. four, Thera-Th. eleven, and Jāt. nine; of the anapaest there are five examples in Iti-v., five in Dhp., fourteen in Thera-Th., and seventeen in Jāt.; of the amphimacer there are four in Iti-v., ten in Dhp., forty-one in Thera-Th., and seventy-five in Jāt.

Hypermetric Lines.—A number of the śloka lines in the Iti-v. are hypermetric. In itself this fact is not surprising, and the same phenomenon is found in Sanskrit. A good treatment of hypermetric verses in Sanskrit is found in Hopkins, o. c., pp. 252–261. None of the pādas of the Iti-v. are catalectic, all of the hypermetric verses being, therefore, hypercatalectic. While there is usually one extra syllable in lines of this kind, we find four śloka lines of ten and one of eleven syllables. As stated before, even pādas are less often hypermetric than odd pādas; of the former there are thirteen (18f, 28l, 29j, 29l, 32f, 42h, 64h, 70h, 75b, 77f, 81f, 99d, 112l) and out of these thirteen, one line is found three times (32f, 64h, 70h); of the latter, the odd pādas, there are twenty-four hypermetric lines (16c, 20i, 21i, 29i, 37a, 37g, 61i, 70e, 75c, 75m, 75o, 76y, 76a′, 81a, 85a, 91a, 91c, 93k, 95i, 99k, 103i, 103s, 106i, 111g; of these 20i and 21i are the same). There is one instance (27k) in a passage, probably an interpolation, of a hypermetric pāda within a triṣṭubh-jagatī stanza.

As stated above, a line is not treated as hypermetric where the extra syllable is due to an epenthetic vowel. For example, such a line as

niccaṁ āraddhaviriyehi (78k)

is scanned – ⏑ – – ⏑ ⏑⏑ – ⏑ I have not counted line 81a

yassa sakkarīyamānassa

as hypermetric, since the second word is most likely a passive

ppl. of *sakkaroti*, Sanskrit *sat kṛ*, where the vowel *a* in Pāli is epenthetic. Similar vowels occur in the Avesta. Another derivative of *kṛ* is found in 103s, where the extra syllable is an epenthetic vowel.

A few lines are hypermetric, as Windisch has indicated in his introduction, p. viii, because the designation for some particular virtue, perhaps, a word of two or more syllables, is contrasted with the term for the corresponding vice, of three or more syllables. Seven lines (29i, 18f, 29j, 32f, 64h, 70h, 103i) are hypermetric from this cause. Thus the line

aḍayhamānena cetasā (29j)

"with uninflamed mind," refers back to the line

dayhamānena cetasā (28j)

"with inflamed mind," in the preceding section.

The fact that a line is hypermetric does not necessarily impugn the genuineness of the line. We may take as examples of this the following pādas—

dukkhaṃ viharati tādiso (28 l)
sukkhaṃ viharati tādiso (29 l)
sukhumaditthivipassakaṃ (81f).

In each of these the regular cadence ⏑ – ⏑ ⏑ is present, the first foot having an extra syllable; the sense of the passage in each case is clear, and the various Mss. are practically identical in the readings of each.

A case where a variant reading gives a normal meter is found in 106i

ucchādanena nhāpanena.

This line would have the same sense ("by anointing and by bathing") were we to follow the reading of the Ms. M, namely

ucchādanena nhānena.

Elision.—Two hypermetric lines have hiatus, and consequently the extra syllable may be avoided by supposing elision to have taken place; these lines are

appassuto apuññakaro (70e)
vimutto upadhisaṅkhaye (112 l)

Leaving aside now the above lines in which the extra syllable may be accounted for by anacrusis, elision, incorrect reading, or especially through contrast of one word in the hypermetric

line with a word one syllable shorter in another stanza, we have to face the fact that there exist some hypermetric lines for which no explanation can be given. Such for example are the odd pādas 20i, 27k, 37a, 37g, 61i, 75e, m, o, 76a′, 81a, 85a, 91a, 93k, 95i, 99k, 111g, and the even pādas 42h, 77f, 99d.

Lines of ten syllables are 16c, 91c, both of which are odd pādas; one curious line of eleven syllables, an even pāda, occurs at 75b, namely:

na kapaniddhike na vanibbake.

Triṣṭubh and Jagatī.—Of the 112 sections of the Iti-vuttaka mentioned in the opening of this paper, 98 were in śloka verse. The remaining fourteen are with three exceptions either in triṣṭubh or jagatī. The three exceptions are probably later interpolations or corruptions of the text, and are written in a mixture of śloka, triṣṭubh and jagatī. These are touched upon below. A pleasing variety is sometimes produced in triṣṭubh stanzas by the occasional introduction of a jagatī verse. This occurs in 38f, 46d, 69c, 69e and 84l, while a sporadic triṣṭubh appears occasionally within a jagatī stanza, as in 87c and 98c. Alternation of the two meters is found in one passage, 47i-h, the first and third lines being in triṣṭubh and the second and fourth in jagatī. In the poetical portion of § 100 we find the first and fourth verses in jagatī and the two intervening verses in triṣṭubh.

A metrical examination of 27i-p shows that there is a rhythmical irregularity in the passage, as well as textual corruption, as indicated by faulty grammar. The stanza in question has seven lines, composed respectively in triṣṭubh, jagatī, hypermetric śloka, jagatī, triṣṭubh, jagatī, triṣṭubh. As will be seen from the notes on this passage in my forthcoming translation of the Iti-vuttaka, several lines are of very questionable genuineness, and for that reason none is included in the following statistics.

Triṣṭubh.—The commonest triṣṭubh line in epic Sanskrit, as pointed out by Hopkins, p. 275, has the form ⏑ – ⏑ – ⏑ ⏑ ⏑ – ⏑ – ⏑. There are twenty-nine lines of this kind in the Iti-v. The first and last syllables are anceps. No example of a long third syllable is found; only two lines have a short fifth and only three a long seventh. The characteristic scheme of

the triṣṭubh verse in the Iti-v. is, therefore, ⏑ – ⏑ – – ⏑ ⏑ – ⏑ – ⏑. The caesura is after the fourth or fifth syllables, slightly oftener after the former. Certain deviations from this norm occur, such as

38g	of the form	– – ⏑ –	– – ⏑ –	⏑ – –
48a	" " "	⏑ – ⏑ –	– ⏑ ⏑ ⏑	⏑ – –
84h	" " "	– – ⏑ –	– ⏑ ⏑ ⏑	⏑ – –
38o	" " "	⏑ – ⏑ ⏑	– ⏑ ⏑ –	⏑ – –
34h	" " "	– – – –	– – ⏑ –	⏑ – – .

The last of these lines is remarkable for its succession of six long syllables. In this particular case it is to be noted, however, that only the best Ms., M, reads ī in the third and sixth syllables ; all the other Mss. have i. Grammatically the long vowel is required.

The two lines, 38h and 109b—

taṃ ve muniṃ antimadehadhāriṃ
yogakkhemaṃ āyati patthayāno,

are irregular only in having the fourth syllable short. It is possible in Pāli, when the caesura comes after a short syllable as in these two lines, for the syllable in question to receive metrical lengthening.

Only one triṣṭubh is hypercatalectic

paripuṇṇasekhaṃ apahānadhammaṃ (46a)

in which instance the first syllable may be taken as anacrusis, as the line is normal in other regards, although it may be noted that the second part has the rare form ⏑ ⏑ ⏑ – .

The line *yo ca satimā nipako jhāyī* (34g) may perhaps be treated best as a catalectic triṣṭubh, with the irregular opening of a first pæon, – ⏑ ⏑ ⏑ .

Jagatī.—Turning next to the jagatī, or line of twelve syllables, we find that here, too, the Iti-v. follows a definite metrical scheme, which is represented

⏑ – ⏑ – – ⏑ ⏑ – ⏑ – ⏑ ⏑ .

Of this type there are twenty-nine. The third and fifth syllables might be represented as common, but there is found a very strong preference for a short third and a long fifth. Twelve lines are different from this norm, or are hypermetric.

Caesura.—The caesura in the jagatī as in the triṣṭubh falls either after the fourth or fifth syllable, but the jagatī differs

from the triṣṭubh in having a preference rather for the caesura to fall after the fifth syllable.

It is possible also that in jagatī verse, as mentioned before in treating of the triṣṭubh, a short syllable may receive metrical lengthening if followed by the caesura, as for example in the line

tayo pana akusale nirākare (87b).

Other instances of a short syllable before a caesura, where the norm requires a long one, are found in lines 44c, 47e and 100a.

Two hypercatalectic jagatīs occur, of which the first,

anupādisesā pana samparāyikā (44c),

may be treated as a normal jagatī with anacrusis. The other line, however,

nibbānadhātū anissitena tādinā (44b),

even though it has the regular opening and close of a jagatī' contains in the middle portion a superfluous long syllable. There is no hint of a Ms. corruption, and we have no help from variant readings. Cf. Hopkins, p. 287 and p. 468.

Irregular jagatīs.—Certain lines in jagatī passages are neither normal nor hypercatalectic, as for example,

tesaṃ so attho paramo visujjhati (98g)
ātāpī bhikkhu nipako jhānalābhī (47j).

In both of these cases also we have no assistance from variant readings, and cannot, therefore, allege Ms. corruption as an explanation of the metrical difficulty.

Textual corruption.—There do exist, however, two or three stanzas in the Iti-v. in which Ms. corruption is apparent. In these few cases, not only is one line irregular, but a longer succession of bizarre metrical effects is found. In 47f and g, for example, we find

samāhito mudito vippasanno ca
kālena so sammā dhammaṃ parivīmaṃsamāno,

or substituting the quantities for the words, we have

∪ – ∪ – ∪ ∪ – – ∪ – – ∪
– – ∪ – – – – – ∪ ∪ – – ∪ – – .

These lines are metrically hopeless, and there is no help to be obtained from variant readings. Still other passages offering

metrical difficulty are 38j-o, and 69. The fifth line of the first of these passages, viz.

sokāvatiṇṇaṃ janataṃ apetasoko

or giving its quantities

– – ᴗ – – [ᴗ ᴗ] ᴗ ᴗ – ᴗ – –

might be emended so as to read *taṃ* instead of *janataṃ*, by which emendation the line would become a regular triṣṭubh. The justification of this emendation is strengthened, perhaps, by the occurrence of the same word *janataṃ* three lines previous. If the emendation be allowed, then, the first two lines are in jagatī, the last four in triṣṭubh.

In the second of these two passages, viz. 69, a-h, a corruption of the text is certain.

yassa rāgo ca doso ca
avijjā ca virājitā
so-maṃ samuddaṃ sagahaṃ sarakkhasaṃ
āmibhāyaṃ duttaraṃ -accatāri
saṅgātigo maccujaho nirūpadhi
pahāsi dukkhaṃ apunabbhavāya
atthaṅgato so na samānam -eti
amohayi maccurājan- ti brāmīti.

The first two lines are in śloka, the third is a regular jagatī, the fourth is a triṣṭubh with the rare opening – ᴗ ᴗ –, the fifth line is a regular jagatī, the sixth is a triṣṭubh with the uncommon middle foot ᴗ ᴗ ᴗ –, the seventh again a triṣṭubh, and the last one a triṣṭubh of the very strange form

ᴗ – ᴗ ᴗ – ᴗ – – ᴗ – ᴗ .

Conclusion.—Pending a comparative study of the meters of the different Pāli works much more far reaching than has yet been made, nothing can be said regarding the relative age of stanzas of the Iti-v. written in śloka, triṣṭubh, or jagatī.

All three of these meters are much more free than the corresponding rhythms in classical Sanskrit, as is to be expected. The śloka has changed in a marked degree from the Vedic type, yet it has at the same time distinct differences from the epic śloka. It is impossible to say whether the Pāli śloka is a direct outcome of Vedic imitation, and it is likewise impossible to postulate any connection or rapport with the later stages of

Sanskrit metrical development, as it might well be true that certain metrical preferences, for example, a long first syllable, are due to the idiosyncrasies of the language.

A more positive result of our analysis is the discovery that the eleven and twelve-syllable meters show less variety than the śloka. Each has in Pāli a well-fixed form, with fully as much regularity of syllabic quantities as has epic Sanskrit (cf. Hopkins, p. 273–320), if indeed there is not even more. But this statement must not be applied to Pāli in general until many other works have been analysed. The fact that the Iti-v. employs jagatī as often as triṣṭubh might seem to point to a late date, but whether this equal occurrence of triṣṭubh and jagatī is the result of chance or intention, no one can say.

On Certain Persian and Armenian Month-Names as Influenced by the Avesta Calendar.—By Dr. Louis H. Gray, Newark, N. J.

The influence of the Zoroastrian calendar, as of Zoroastrianism itself, was far-reaching, extending not only to the Transoxian regions of Chorasmia and Sogdiana, but to Armenia and Cappadocia, even as the Iranian faith had spread. This is, indeed, no new discovery—it has been known at least since 1836, when Benfey and Stern, in their *Ueber die Monatsnamen einiger alter Völker, inbesondere der Perser, Cappadocier, Juden und Syrer*, 76–120, themselves following Reland's suggestion of exactly two centuries ago (*Dissertationes miscellaneæ*, ii. 129): "examinanda Tibi hæc Cappadocica mensium nomina, lector, exhibeo . . . . in iis umbram mensium Persicorum mihi videor detexisse," demonstrated that the Cappadocian month-names were borrowed, one and all, from the Zoroastrian calendar. Furthermore, Lagarde, in his *Gesammelte Abhandlungen*, 9, 163, and Hübschmann, in various rubrics of his *Armenische Grammatik*, i., have shown the dependence of certain Armenian month-names on the Avesta-Pahlavi system; while Sachau's translation of al-Biruni's *Chronology of Ancient Nations*, 52–53, 56–57, 82–83, 220–225, 384, 425–426, gives the names of the months and other calendrical data of the inhabitants of Chorasmia, Sogdiana, Seistan, Bukhārīk (?), and Qubā. An additional list of Sogdian month-names is given in three fragments of the Turfan manuscripts published by F. W. K. Müller in his *Die "persischen" Kalendarausdrücke im chinesischen Tripiṭaka* (*Sitzungsberichte der königlich preussischen Akademie der Wissenschaften*, 1907, 458–465). The Armenian month-names[1] are given in order by Dulaurier, in his *Récherches sur la chronologie arménienne*, 10–14, and the same scholar records not only the Armenian calendar based on the Julian system and dating probably from the period of Constantine the Great (pp. 37–38), as well as

[1] The study of Hagopian on the Armenian months in the Armenian periodical *Banasēr* for 1900 has unfortunately been inaccessible to me.

the month-names of Azaria of Julfa, who flourished early in the seventeenth century (pp. 115–117), but also an Albanian menology of uncertain date (p. 167). There seems to be, however, no discussion in which these scattered data are brought together and summarized, even Marquart, in his *Untersuchungen zur Geschichte von Eran*, ii. 198–201, 213–215, and Ginzel, in his section on the Persian calendar (*Handbuch der mathematischen und technischen Chronologie*, i. 275–309), omitting any detailed comparison. In like manner, neither Sachau, in his *Zur Geschichte und Chronologie von Khwārizm* (*Sitzungsberichte der Wiener Akademie der Wissenschaften*, phil.-hist. Klasse, lxxiii. 471–506), nor Tomaschek, in his *Centralasiatische Studien*, i. *Sogdiana* (*ib.* lxxxvii. 67–184), discusses the calendar of these peoples. Indeed, so vague is our knowledge of the Transoxian language, and so meagre the remains, that any attempt to study the month-names must be largely a matter of conjecture and hypothesis. This difficulty is increased in the case of the Seistanian calendar, which may be Scythic (cf. Justi, in *Grundriss der iranischen Philologie*, ii. 489), and of the Bukhārīk (?) and Qubān systems, both of which, like the Chorasmian and Sogdian, are Transoxian. It is at least clear, however, that the Chorasmian calendar was borrowed from the Avesta system before the invasion of Alexander the Great, and the Sogdian before the revolt of Diodotus in the third century B. C. (Marquart, ii. 201).

Contrariwise, the Zoroastrian calendar, or possibly some system akin to the Old Persian, may perhaps have been current in lands where Mohammedan chronology now rules. I allude particularly to the Baluchi and Afghan calendars. In Baluchistan the mode of reckoning time is entirely Islamitic (Mockler, *Grammar of the Baloochee Language*, 120), while in Afghanistan we find two systems of month-names. One of these, in frequent use along the eastern frontier between Afghanistan and India, is of Indian origin (Trumpp, *Grammar of the Paštō*, 364–365), while the other is borrowed from the Mohammedan menology and is as follows (*ib.* 363–364):

Afghan	*Mohammedan*
Ḥasan Ḥusain, "(the month of) Ḥasan and Ḥusain"	Muḥarram
Ṣafarah	Ṣafar

Vṛunba'ī Xōr, "First Sister"	Rabī'-al-awwal
Dvayamah Xōr, "Second Sister"	Rabī'-ath-thānī
Dreyamah Xōr, "Third Sister"	Jumād-al-awwal
Calōramah Xōr, "Fourth Sister"	Jumād-ath-thānī
Da Xudāe Miyāšt, "Month of God"	Rajab
Da Šō Qadr Miyāšt } "Month of the Night of Da Barāt Miyāšt } Power"	Ša'bān
Rōzah,[1] "Fast"	Ramaḍān
Da Vṛūkai Axtar Miyāšt } "Month of the Da Vārah Axtar Miyāšt,[2] } Lesser Fast"	Šawwāl
Miyāni Xāli Miyāšt,[2] "Intermediate Month[3]"	Dhu-l-Qa'dah
Da Lōe Axtar Miyāšt, "Month of the Greater Fast"	Dhu-l-Hijjah

In the preparation of the article on the Persian calendar for Dr. James Hastings's forthcoming *Dictionary of Religion and Ethics*, my attention was directed to this problem the more since I had failed to evaluate it in my section on the same subject in the *Grundriss der iranischen Philologie*, ii. 675–678. While, in a sense, this present study is rather a summary and collocation of results previously attained by others than a presentment of independent researches, yet it has seemed to me that a collection of scattered data might, when combined, throw an increased light on the Avesta calendar itself; and in one or two points, minor though they be, I have perhaps succeeded in making some advance. It is also my pleasant duty to acknowledge with gratitude the generous assistance of M. A. Meillet, of the Collège de France, Paris, in his reply of March 3, 1907, to my queries concerning the Armenian month-names; to the Rev. Dr. Thomas P. Hughes, of Brooklyn, who on February 20, 1907, responded with equal kindness to my request for information concerning the names of the Afghan months; and to Messrs. N. Nazarian and S. Surenian, of New York, who most unselfishly and courteously aided an entire stranger in determining the meaning of the Armenian day-names.

---

[1] The translation of this and the four names following were kindly supplied me by the Rev. Dr. Thomas P. Hughes, the well-known Afghan scholar.

[2] These forms are also due to Dr. Hughes.

[3] Between "the lesser fast" of 'Īd-al-fiṭr and the "greater fast" of 'Īd-aḍ-ḍuḥā'.

I. Fravartīn (March-April). None of the calendars affiliated with the Avesta-Pahlavi system show a month-name similar to this, which is transcribed Φαροναρτης, Φαρβαρδιν, and Φαρφαρδιν by Byzantine writers on the Iranian calendar,[1] although the nineteenth day of each month, which bears the same name in the Zoroastrian calendar, is termed فروذ in Sogdian and روجن in Chorasmian. The month is called, instead, simply "New Year," the appellation being borrowed from an Avesta **nava sarəδa*, "new year" (Chorasmian ناوسارچی, Sogdian نوسرذ, ناوسرذیج, Bukhārīk (?)[2] نوسرد, Armenian *Nawasard*, Albanian *Nawasardus*). The form of the name is of the more interest in that it represents an older form even than the Pahlavi (*sāl*, "year," cf. Persian سال), and may thus be compared with the Ossetic *särde*, *särdä*, *särd*, *sard*, "summer" (Avesta *sarəδa*, 'year"; cf. Hübschmann, *Etymologie und Lautlehre der ossetischen Sprache*, 55; idem, *Armenische Grammatik*, i. 202; Horn, *Grundriss der neupersischen Etymologie*, 153; Salemann, in *Grundriss der iranischen Philologie*, i. a, 267). To the same stage of borrowing doubtless belongs the Talmudic נוסרדי (WZKM. viii. 366), the term applied by the *'Abodah Zarah* to a Persian festival (Levy, *Neuhebräisches und chaldäisches Wörterbuch*, iii. 389), as well as the νέον σάρδιν τὸ νέον ἔτος of Johannes Lydus xxxix. 13. The Avesta-Pahlavi form, however, is represented in the Cappadocian calendar by Ἀρταιστην and its variants (Benfey and Stern, *Ueber die Monatsnamen einiger alter Völker*, 85–89; otherwise, Marquart, i. 63). The Seistanian calendar calls the first month کواذ, which may possibly be in honor of the Kavāta of the Avesta (Yasht xiii. 132; xix. 71), the legendary founder of the Kayanian Dynasty (Justi, *Iranisches Namenbuch*, 159), whose home was in Seistan (Yasht xix. 65 sqq.; cf. Geiger, *Ostiranische Kultur*, 99–100, 108, 411). The calendar of Azaria of Julfa calls the first

[1] On these references see Gray, *Byzantinische Zeitschrift*, xi. 468–472, and the same writer's article in *Avesta, Pahlavi, and Ancient Persian Studies in Honour of . . . Sanjana*, 167–175, together with the citations there given.

[2] "Perhaps the word bears some relation to بخارا, *i. e.* Bukhārā." Sachau, 393; otherwise, but less plausibly, Marquart, ii. 199.

month *Šams*, a loan-word from the Arabic شمس, "sun," but the Qubān[1] حلو is unclear to me.

II. Arṭavahišt (April-May). This is represented as a month-name only by the Chorasmian اردوست and the Cappadocian Ἀραιοτα and its variants (Benfey and Stern, 89–92), although as the name of the third day of each month it finds equivalents in the Chorasmian اردوشت (variant اردوست) and in the Sogdian اردا خوشت. The Greek writers transcribe the name by Ἀρτιπεσστ, Ἀρτιπεεστ, Ἀρδεμπεεστι, and Ἀρδεμπεως. The Bukhārīk (?) name فدی نوسرد apparently represents an Avesta **paiti-nava-sarəδa*, "after the new year," but the Sogdian جرجن (variants خورزنیج, خورزن, حوجن, حرحن), like the Seistanian رهو, is unclear. The Armenian calendar likewise diverges from the Avestā, the corresponding month of its system being named *Hori*, "second month," a derivative of the Georgian *ori*, "two,"[2] while Azaria of Julfa calls this month *Adam* in honor of the father of the human race. In Albanian the second month was termed *Tulēn*, which, if the Armenian *t* was pronounced *d* at the time of the formation of the Albanian calendar, bears a strong, though perhaps fortuitous, resemblance to the Albanian *dɛlɛhɛ*, "juniper" (Meyer, *Etymologisches Wörterbuch der albanesischen Sprache*, 65). The Qubān اوین is unclear to me.

III. Horvadaṭ (May-June). This month, which is transcribed Χορταρ in Greek, is very accurately represented by the Chorasmian هروداذ, while the sixth day of each month, which bears the same name in the Avesta-Pahlavi system, is given in Chorasmian, in like manner, by هروداذ and in Sogdian by ردد. The Cappadocian equivalent is Ἀραιοτατα and its variants (Benfey and Stern, 92–94). The Sogdian نیسن (variants نیسنج, نیسنیج, نسن, نس) is clearly the Assyrian *Nisannu*,

[1] "Ḳubā was the second largest town of Farghāna, not far from Shāsh," Sachau, 393.

[2] My thanks for this identification are due to M. Meillet. On the general problem of Caucasic loan-words in Armenian, cf. Hübschmann, *Armenische Grammatik*, i. 396–398.

Hebrew ניסן (April-May), the divergency of time being doubtless due to retrogression of the calendar at the time when the Sogdians adopted this month-name. The Bukhārīk (?) سافول, Qubān ححش (doubtfully compared by Marquart, ii. 200, with the twelfth Old Turkish month جقشاباط), Seistanian اوسال, and Albanian *Namoçn*, are unclear to me. The Armenian *Sahmi*, however, denotes simply "third month," being derived from the Georgian *sami*, "three,"[1] while Azaria of Julfa's *Šbat'* is simply the Hebrew שבט.

IV. Tīr (June-July). The month Tīr, transcribed Τυρμα, Τουρμα in Greek, is represented in the Chorasmian calendar by جیری,[2] while for the day of the same name, the thirteenth of each month, the Chorasmian and Sogdian systems have جیزی (read, with the variant, جیری) and تیش respectively. The Sogdian month-name corresponding to Tīr is بساك (نساکنج, بساکنج, بساك, پساك, . . . نا). This word may possibly be identical with the Persian بساك, "garland of flowers." The Seistanian تیرکیانوا, like the Armenian *Trē* (Lagarde, *Gesammelte Abhandlungen*, 9) and the Cappadocian Τειρα and its variants (Benfey and Stern, 94–95), is clearly derived from the Pahlavi Tīr. The Albanian name of the fourth month, *Yilē*, may possibly be a translation of the old Iranian term, if it may be connected with the Albanian *ël*, *il*, "star" (Meyer, 460). The Bukhārīk (?) سافت, Qubān لولیا, and Azaria of Julfa's *Nazai* are unclear to me. The name Tīr has been borrowed as a planet-name, it is interesting to note, in the Chinese (Cantonese pronunciation) *Tit*.

---

[1] Here again my thanks are due to M. Meillet.

[2] On the confusion of Tištrya, the dog-star, with his original opponent Tīr, Mercury, cf. Spiegel's translation of the Avesta, iii. introd. 21–23; Darmesteter, *Le Zend Avesta*, ii. 411–413; Nöldeke, *Persische Studien*, i. 33–36; Justi, *Iranisches Namenbuch*, 325: and Bartholomae, *Altiranisches Wörterbuch*, 652, and the references there given. On Chorasmian *j* for an original Iranian *t*, cf. Nöldeke, *loc. cit.* As Indian parallels may be cited such forms as Prakrit *ciṭṭhaï*, Uriya *cidā* = Sanskrit *tiṣṭhati*, "stands" (Pischel, *Grammatik der Prākrit-Sprachen*, § 216; Gray, *Indo-Iranian Phonology*, § 223).

V. Amerōdaṯ (July-August). The Zoroastrian month Amerōdaṯ, transcribed Μερταρ in Greek, is represented by the Chorasmian همداد (variant همداذ), while for the seventh day of each month, which bears the same name, the Chorasmian and Sogdian calendars have همداذ and مردد respectively. The Cappadocian equivalent is Ἀμαρτοτ and its variants (Benfey and Stern, 95–97), while the corresponding Armenian month is *Kiadoç*, "(the month) of crops," a derivative of *k'adel*, "to gather" (Dulaurier, *Récherches sur la chronologie arménienne*, 12). As M. Meillet kindly informs me, "it is true that, at the period of the origin of the Armenian era, it corresponded to the month of November, but the name existed previously and was in use in an earlier system." Azaria of Julfa's name for the fifth month, *Gamar*, is merely a loan-word from the Arabic قمر, "moon." The Sogdian اشناخندا (variants اشناخنداه, اشناخندا, شناختنیج), Seistanian سریزوا (read سرینوا by Marquart, ii. 199), Bukhārīk (?) اوریس, and Albanian *Bokavoh*, the corresponding names of the fifth month, are unclear to me. The Qubān لو is merely the East Turkish name of the same month.

VI. Šatvaīrō (August-September). To the name of this month, which is transcribed Σαχριουρ and Σαρεβαρ in Greek, corresponds the Chorasmian اخشریوری, the homonymous day, the fourth of each month, being termed اخشریوری in Chorasmian and خستشور in Sogdian. The Cappadocian derivative from the Zoroastrian month-name is Ξανθηρι and its variants (Benfey and Stern, 97–101). The Sogdian name of the month, given by al-Biruni as مژیخندا (variants مرخندا, مریخندا, مریخندا), is shown by the Turfan خزانانج (variant غزانانج) to have been "autumn month"; and to have been equivalent to خزان (October), the eighth month in the short-lived calendar introduced by Yazdagird III. (Hyde, *Historia Religionis Veterum Persarum*, 197). The other names of the sixth month, Seistanian مریزوا, (read مرینوا by Marquart, ii. 199), Bukhārīk (?) یسن, Qubān نر, Armenian *Arag*, Azaria of Julfa's *Nadar*, and Albanian *Marē*, are unclear to me.

VII. Mitrō (September-October). This month-name, transcribed in Greek Μεχερμα and Μεχιρ, is represented in the Persian calendars, curiously enough, only by the Qubān مهر, the Chorasmian and Sogdian equivalents being اومرى and نغاز (variants نغكان, نفكان, فعكان, فعكان) respectively. The former is of unknown signification to me. But the latter, reflected by the Chorasmian فيغ, the name of the sixteenth day of each month, is shown by the Turfan form بغكانج to signify "god-month" (on *γ* as a dialectic Persian development of *b*, see below, under IX.; and on *baga*, *bagu* = *Mithra*, see Marquart, i. 64; ii. 129, 132–134). The name Mitrō is represented in Cappadocian by Μιθρι and its variants (Benfey and Stern, 101–102) and in the Armenian calendar by *Mehekan* (Hübschmann, 194; Lagarde, 9), while Azaria of Julfa represents it by *Tʿir*, i. e., Tīr (see above, under IV.), the discrepancy being due, perhaps, to the retrogression of the calendar. The remaining names of the seventh month, Seistanian مزور, Bukhārīk (?) بسك, and Albanian *Bekuē*, are unclear to me. The Iranian Mihr appears as a borrowed planet-name in the Chinese (Cantonese pronunciation) *Mit*. It is likewise the name of the eighth day of each month in the Armenian calendar.

VIII. Āvān (October-November). This month, transcribed Ἀπαν and Ἀπανμα in Greek, is exactly represented by the Sogdian ابانج (variants ابابج, بانج), although its name for the corresponding day of each month, the tenth, is انجن. The Chorasmian month-name is ياناخن, which was also applied to Āvān as the tenth day of each month, but I am not certain of its meaning. It is probable, however, that it is synonymous with the corresponding Old Persian month Ādukani, "(month of) canal-digging" (cf. Marquart, ii. 198). In Cappadocian the form of Āvān is Ἀπομου and its variants (Benfey and Stern, 102–108), while in Armenian the eighth month is the "sun-month," *Arēg* (Hübschmann, 424). The other month-names, Seistanian هرانوا, Bukhārīk (?) جدل (which can scarcely be the Arabic جدل, "battle," "altercation"), Qubān الما, Albanian *Cusuli* (unless possibly connected with Albanian *ǵak*, "blood," "vendetta," "death" [cf. Meyer, 136]), and Azaria

of Julfa's *Dam*, are unclear to me. It might indeed be suggested that the latter name is the Persian دم "breath," "wind," and that it was adopted in allusion of the change of the monsoon from the northeast to the southwest at this season of the year; but the uncertainty of the entire problem, and Julfa's inland situation, near Isfahan, render such an explanation very hazardous.

IX. Ātarō (November-December). The Chorasmian name of this month, transcribed 'Αδαρ, 'Αδερ, 'Αδερμα in Greek, is ارو (read ادو, variants ارى, ادو), and the ninth day of each month, which bears the same name in the Zoroastrian calendar, is called ارو (read ادو) in Chorasmian and اتس in Sogdian. The Sogdian name of the ninth month is فوغ (Turfan form بوغيج), a dialectic form corresponding to Avesta *baγa*, Old Persian *baga*, "god," represented in New Persian by the Ferghanish فغ, "idol" (Horn, in *Grundriss der iranischen Philologie*, i. b, 78). The Cappadocian equivalent is 'Αθρα and its variants (Benfey and Stern, 108–109), while the Armenian name of the ninth month, *Ahekan*, is likewise derived from the Avesta-Pahlavi appellation (Hübschmann, 95; Lagarde, 9). Azaria of Julfa's name, *Hamir*, is the Arabic امير, but the Seistanian اركيازوا (unless read, with Marquart, i. 64; ii. 199, اركيانوا, "month of fire-times"), the Bukhārīk (?) هيات, the Qubān نوا, and the Albanian *Bondokē*, are unclear to me.

X. Dīn (December-January). This month-name, transcribed Δημα and Νται (ντ=δ, as in Modern Greek) in Greek, represents the Avesta *daδušō*, "(month) of the Creator" (Gray, in *Grundriss der iranischen Philologie*, ii. 677, and the references there given), and is, therefore, equivalent to Pahlavi *Aūharmazd* and Avesta *Ahura Mazda*. It is, accordingly, accurately represented by the Chorasmian ريمژد (variant ريمزد), while the first day of each month, *Aūharmazd* in the Zoroastrian calendar (corresponding to *Aramazd*, the fifteenth day of each Armenian month), is called ريمژد in Chorasmian and خرمژد in Sogdian, and is borrowed in the Chinese planet-name *Wun-mut-sï* (Cantonese pronunciation). The eighth, fifteenth, and twenty-third days of each month, termed *Dīn pa Ātarō*, *Dīn pa Mitrō*, and

Dīn pa Dīn in Pahlavi, are called دذو and دست in Chorasmian and Sogdian respectively; and the Iranian name is also closely followed by the Cappadocian Δαθουσα and its variants (Benfey and Stern, 109–110). The Sogdian name for the tenth month is مسافوغ (variants مسانوغ, مرسافوغ, ميش بوغيج), "great god," the fitting appellative of Ormazd, especially as his month comes after that of Ātarō, of whom he is, in Avesta mythology, the father (cf. Yasna xxxvi. 3; lxv. 12; Siroza i. 9; ii. 9; Yasht xix. 46, 49; Gah i. 9).[1] The word فوغ has already been discussed. The term مسا is to be equated with Avesta, Pahlavi, Gabrī *mas*, "great," Nāyīnī *mes*, Samnānī *mesīn* (Horn, in *Grundriss der iranischen Philologie*, i. b. 17; for another interpretation, see Marquart, ii. 198–199). The Bukhārīk (?) سيون is apparently the Hebrew סיון, the ninth month, calendrical retrogression again playing a part. The *Aram* of Azaria of Julfa is merely the name of the eponymous hero of Armenia. The Seistanian كريشت, Qubān وعاه, and Albanian *Oreli* are unclear to me; while the Armenian Marēr (for *Marear) has been equated with the Avesta *Maiδyāirya*, "mid-year" (Marquart, ii. 205).

XI. Vohūman (January-February). This month-name, transcribed Πεχμαν and Μπαχμαν (μπ=β, as in Modern Greek) in Greek, seems to find its equivalent only in the Chorasmian اشمن (variants ارسمن, اخمن) and in the Cappadocian Ὀσμαν and its variants (Benfey and Stern, 110–113; Marquart, ii. 215); while the Sogdian has ژيمدا (variants ژيمدج, ريمد, ريمد, ژيمتيج ژيمطيج), whose meaning is unknown to me. Moreover, the corresponding day of each month, the second, is represented in Chorasmian and Sogdian by ازميين and جهينر respectively. Equally uncertain are the Bukhārīk (?) مجسند, Qubān ىن, Albanian *Exna* and Azaria of Julfa's *Ovdan*. The Seistanian كرسن, on the other hand, seems to represent the Karsna

[1] Cf. the Old Persian sequence of the months Āθriyādiya, "worship of fire," and Anāmaka, "nameless," (*i. e.* sacred to the ineffable Auramazda).

of Yasht xiii. 106, 108, who may possibly have been the eponymous hero of the Qāren dynasty, which played a prominent part in the Arsacid and Sassanid periods (Darmesteter, *Le Zend-Avesta*, ii. 536, note 212); while the Armenian name of the eleventh month, *margac*, seems to mean "(month) of meadows," although Marquart, i. 64, dissents from this etymology, considering it a loan-word from the Old Persian month-name (preserved only in the New Susian text, Bh. iii. 43, under the form *Markazanaš*) *Margazana*, "brood of birds." The Sogdian form of Vohūman was *Vinxān*, preserved also in the Chinese loan-name of the planet Mars, *Wen-Hon* (Cantonese pronunciation).

XII. Spendarmaṯ (February-March). The name of the twelfth month, transcribed Ἀσφανδαρηματ, Ἀσφανταρηματ, Ἀσφανταρ, and Αὐφανταρ in Greek, is represented by اسبندارمجی in Chorasmian, while the fifth day of each month, which bears the same name in the Zoroastrian calendar, appears in Chorasmian as اسبندارمجی, and as سبندارمذ in Sogdian. The Sogdian خشوم (variants حسوم, خشوص, اخشومیج) is very uncertain in meaning, although it is plainly traceable in the full Chorasmian name for this month اسبندارمجی فوخشوم. We know that "on the last day of this month the Sughdians cry over those who died in past times, they lament over them and cut their faces. They lay out for them dishes and food, as the Persians do in Farwardajān. For the five days, which are the ἡμέραι κλοπιμαῖαι to the Sughdians, they fix at the end of this month" (al-Biruni, *Chronology of Ancient Nations*, tr. Sachau, 222; cf. 57). Hazardous though it be to operate with such scanty material, it may be suggested that in خشوم, if it be an abbreviation of فوخشوم, we may possibly have a derivative of the Sogdian and Chorasmian verb corresponding to the Modern Persian بخشودن, "forgive" (for Sogdian *f*=Modern Persian *b*, see above, under IX.) and to the Judæo-Persian בוכשאיד (cf. Horn, *Grundriss der neupersischen Etymologie*, 43). The Cappadocian equivalent of Spendarmaṯ is Σονδαρα and its variants (Benfey and Stern, 113–115), while the Armenian name of the corresponding month is *Hrotic*, a loan-word from the Pahlavi **fravartakān*, "the (five epagomenal days) dedi-

cated to the Fravašis" (Hübschmann, 184–185; Lagarde, 163).[1] The Seistanian سارو (unless it be the Modern Persian سارو, "starling"), Bukhārīk (?) دریمنکان, Qubān اوناه, Azaria of Julfa's *Nichan*, and Albanian *Baxneai* are unclear to me.[2]

The names of the days in the Chorasmian and Sogdian calendars show many instances of borrowing from the corresponding day-names of the Zoroastrian system. Though the list of the Chorasmian and Sogdian names of the days may conveniently be found both in Sachau's translation of al-Biruni's *Chronology of Ancient Nations*, 56–57 and in Ginzel's *Handbuch der mathematischen und technischen Chronologie*, i. 307–308, the following list of day-names, restricted to appellations borrowed directly from the Zoroastrian calendar, may be found of use: 1. Pahlavi Aūharmazd=Chorasmian ریمژد, Sogdian خرمژد; 3. Pahlavi Arṭavahišt = Chorasmian اردوشت, Sogdian ارداخوشت; 4. Pahlavi Šatvairō = Chorasmian اخشریوری, Sogdian خستشور; 5. Pahlavi Spendarmaṯ=Chorasmian اسبندارمجی, Sogdian سبندارمذ; 6. Pahlavi Horvadaṯ=Chorasmian هروداذ, Sogdian رود (?); 7. Pahlavi Amerōdaṯ=Chorasmian همداذ, Sogdian مردد; 8, 15, 23. Pahlavi Dīn (pa Ātarō; pa Mitrō; pa Dīn)=Chorasmian دذو, Sogdian دست (see above, under X.); 9. Pahlavi Āṯarō=Chorasmian ارو (read ادو), Sogdian اتس; 11. Pahlavi Xūršēṯ=Chorasmian اخیر, Sogdian خویر; 12. Pahlavi Māh=Chorasmian ماه, Sogdian ماخ; 13. Pahlavi Tīr=Chorasmian جیزی, Sogdian تیش; 14. Pahlavi Gōš=Chorasmian غوشت, Sogdian غش; 17. Pahlavi Srōš=

---

[1] This suggests a still more daring tentative explanation of the Sogdian خشوم than the one very timidly ventured above, namely, that it represents a derivative of Avesta *xšvaš*, "six," *xštūm*, "for the sixth time," as the five epagomenal days plus the last day of the twelfth month for the connecting link. Marquart, ii. 198, however, connects the name with the Avesta *xšnaoma* "contentment."

[2] Allusion may be made in this connection to the names of months and days substituted by Yazdagird III. for the old religious appellations. The list may conveniently be found in Hyde, 195–200, with full elucidation, and is, therefore, omitted here.

Chorasmian اسروف (? read اسروش ?), Sogdian سرش; 18. Pahlavi Rašnū=Chorasmian رشن, Sogdian رسن; 19. Pahlavi Fravarṯīn=Sogdian فروذ (? cf. Hübschmann, 185); 21. Pahlavi Rām=Chorasmian رام, Sogdian رامن; 22. Pahlavi Vāṯ=Chorasmian and Sogdian واذ; 24. Pahlavi Dīn=Chorasmian دینی, Sogdian دین; 25. Pahlavi Arṯ=Chorasmian ارجوخی (Nöldeke 34), Sogdian ارذخ; 26. Pahlavi Āštāṯ=Chorasmian اشتاذ, Sogdian استاذ; 27. Pahlavi Āsmān=Chorasmian اسمان, Sogdian سمن; 28. Pahlavi Zamyāṯ=Sogdian راجید (read زاجید); and 29. Pahlavi Māraspānd=Chorasmian مرسبند.

The names of the remaining Chorasmian and Sogdian days are too uncertain in meaning for discussion here; and in like manner, the Sogdian names of the five epagomenal days (al-Biruni, 57) and the Chorasmian names of the six *gāhanbārs*, or festivals in the course of the year (al-Biruni, 225, cf. 425–426; and Roth, ZDMG. xxxiv. 716–717, even when compared with their Zoroastrian equivalents, require a deeper investigation, and probably a far greater knowledge of the living dialects of these regions than we at present possess.

Like the Avesta, Chorasmian, and Sogdian calendars, the Armenians also named the days of their months, instead of numbering them, as among the ancient Persians (cf., on the possible adoption of the Avesta system of day-names by the Achæmenians, West, *Sacred Books of the East*, xlvii. introd., pp. 44, and *Academy*, xlix. 348; Marquart, ii. 210–211). Although Christian and geographical appellations are found among them, Zoroastrian influence is evident in at least five names: *Mihr*, the eighth day (corresponding to *Mitrō*, the seventh month and sixteenth day of each month in the Zoroastrian calendar); *Aramazd*, the fifteenth day (corresponding to *Aūharmazd*, the first day of each month, and to *Dīn*, the tenth month and twenty-fourth day of each month in the Zoroastrian calendar); *Anahit*, the nineteenth day (corresponding to the well-known goddess Anāhita of the Avesta); *Ṇpat*, the twenty-sixth day (corresponding to the Indo-Iranian water-deity Apām Napāt, but confused with the name of a mountain in Armenia, cf. Spiegel, *Eranische Alterthumskunde*, i. 173, ii. 54); and

Vahagn, the twenty-seventh day (corresponding to *Vahrām*, the twentieth day of each month in the Zoroastrian calendar).

The list of the Armenian day-names, which seems to be little known, is given as follows in Alishan's Armenian "Ancient Faith of the Armenians," 143–144, together with the supplementary translation of some of the terms furnished me by the courtesy of Messrs. Nazarian and Surenian: 1. *Areg* ("sun," corresponding in name to the eighth Armenian month and the eleventh Avesta day); 2. *Hrand* ("earth mixed with fire"); 3. *Aram* (identical with the name of the tenth month of Azaria of Julfa); 4. *Margar* ("prophet," i. e., St. Sylvanus; cf. Acts, xv. 32); 5. *Ahrank'* ("half-burned"); 6. *Mazdel* or *Mazt'el*; 7. *Astlik* ("Venus"); 8. *Mihr* ("Mithra"); 9. *Jopaber* or *Xrovaber* ("tumultuous"); 10. *Març* ("triumph"); 11. *Erezhan* or *Erezkan* ("hermit"); 12. *Ani* (name of an ancient fortified city of Armenia); 13. *Parxar*; 14. *Vanat* ("host, refectioner of a monastery"); 15. *Aramazd* ("Ahura Mazda"); 16. *Mani* ("beginning"); 17. *Asak* ("beginningless"); 18. *Masis* (the Armenian name of Mount Ararat); 19. *Anahit* ("Anāhita"); 20. *Aragac* (name of a mountain in Armenia); 21. *Gorgor* or *Grgur* (name of a mountain in Armenia); 22. *Kordi* or *Korduik'* (a district in ancient Armenia regarded as the original home of the Kurds); 23. *Cmak* ("east wind" or "cool places in forests"); 24. *Lusnak* ("half-moon"); 25. *Ç'rōn* or *Sp'iur* ("dispersion"); 26. *Npat* ("Apām Napāt"); 27. *Vahagn* ("Vahrām"); 28. *Sēin* ("mountain"); 29. *Varag* (name of a mountain in Armenia); 30. *Gišeravar* ("the planet Venus after sunset"). Both in this calendar and in Azaria of Julfa's system the five epagomenal days are termed simply *Aveleac*, "redundant, superfluous."

On a Pahlavi Bowl-Inscription deciphered by the late E. W. West.—Presented by Professor A. V. WILLIAMS JACKSON, Columbia University, New York City.

AMONG the papers of the late distinguished Iranian scholar, Dr. E. W. West, Honorary member of the American Oriental Society, is one in the form of a correspondence relating to a short Pahlavi inscription carved on a silver bowl in the possession of M. Th. Teplonchoff of Ilinsk in the Government of Perm, Russia. So far as I know, the inscription has never been published or its decipherment made known. For that reason scholars may be glad to have it made accessible to them, together with Dr. West's correspondence on the contents of the inscription. I present, therefore, first the letter which Dr. West received from Mr. Abercromby on the subject and then I reproduce the late scholar's reply, which is characteristic of the modesty, conservatism, and sound judgment for which he was known.

(COPY OF LETTER TO DR. WEST.)

62 PALMERSTON PLACE,
EDINBURGH
Nov. 16 [1897]

"Dear Sir:

I enclose a Pehlvi inscription in the hope that you may be able to read it if only in part. It was copied by my friend Mr. Teplonkhov of Ilinsk in the Gov't of Perm and is scratched on a silver bowl in his possession. He has other silver vessels in the Persian art of the Sassanide dynasty on which inscriptions are cut and a good many are known in the Govt. of Perm. But no one at St. Petersburg has been able to read any of them for him.

Yours truly
JOHN ABERCROMBY."

(COPY OF REPLY BY DR. WEST.)

MAPLE LODGE, WATFORD
Nov. 25th, 1897.

"Dear Sir:

I think I have deciphered an intelligible sentence, constituting the Pahlavi bowl-inscription which you sent me on

the 16th instant; but without experience of other inscriptions, on similar vessels, I cannot be very certain of the exactness of my interpretation in all its details.

The inscription may be read as follows:—

[Pahl.] *Shamūl zī ger denā īnā tafshālak mutagad-rīsh, valā zad, zag gōvbag (govāg?)* $\frac{s}{ger}$.

[Trans.] 'Samuel the stranger, pouring out the breakfast of stew of this vessel, consumed it; the witness of it is $\frac{s}{ger}$.'

Shamūl is either a contraction of Shamūēl, or the *ē* may actually exist among the confused scratches about this name.

The words *ger*=غير (compare גֵּר, גֵּיר), *īnā*=اِناء, and *mutagad* (compare متغدّي) are Arabic; the first being used by the Jews for 'one dwelling in a foreign land.'

Tafshālak is a slight modification of the Persian تفشره= تفشيره=تفشله=تفشيله, 'a stew of lentils or vegetables, or of meat, eggs, carrots, and honey.' The Jews seem to have adopted it, in the form תַּבְשִׁיל.

The remaining seven words are commonly used in Ms. Pahlavi.

It is not to be supposed that the words are *easily* read. The letters *d*, *g*, *ī*, or *y*, *z* are all written much alike in this alphabet, so are *ā*, *h*, *kh*, also *l* and *r*, *ū* and *n*. And, without a large quantity of text, it is difficult to discover the peculiarities of the particular writer. Thus, decipherment of each letter becomes a long process, based upon the gradual elimination of all impossibilities, and governed by the necessity of recognizing not only each word by itself, but also as to its capability of making sense with its neighbours. The letter *sh* occurs in two forms, , an older form in *Shamūl*, and a later form in *tafshālak* and *rīsh*; and this may afford a means of guessing the age of the inscription, for the dated coins of the rulers of Taparistān pass from one form to the other, in their dates, about A. D. 710, so far as my memoranda inform me.

In transliteration I use *ā* (not ā) for Pahlavi when it is a descendant of Sassanian ; also *d* for *t* when pronounced and written د *d* in Persian. The final monogram I suppose to be a signature of the owner $\frac{s}{ger}$; but it may be merely ornamental.

Of course, I have borne in mind the possibility of modern forgery: but I do not think there is any probability of this.

The usual result of such attempts is to produce a text easy to read, so far as the letters are concerned, but very difficult and indeterminate as to its meaning. Here the reading is difficult, but the meaning is determinate, so far as I can see. Whether it would be possible to read the inscription differently, so as to give another meaning, I cannot say. One could read *dar*, 'into,' instead of *ger*, but this would not alter the general meaning, and would leave the name rather incomplete.

The first letters that were obvious were *sh*, *l*, *b*, *ā*, and *denā*, then or *t d*, and *sh*; later *valā*. The rest had to be worked out by degrees.

I suppose *tschudischer* is equivalent to German *judischer*, 'Jewish'; and I think I have read that there were Jews in, or near, the Krimea in former times, who might very well have had a knowledge of Pahlavi writing; as Jews were often employed as scribes by the Sassanians.

If M. Teplonchoff has other inscriptions of a similar character, it would be well worth while to have them deciphered, as their contents might confirm, or modify, the conclusions I have arrived at from this single specimen. If they are as perfect as this one, I shall be glad to try if they are equally legible, provided I can be allowed to take my own length of time to study them. In case of any of the scratches being so worn as to be hardly legible, the copy should be shaded over with pencil in the worn places, as a warning, thus [*denā* is here indicated in shading].

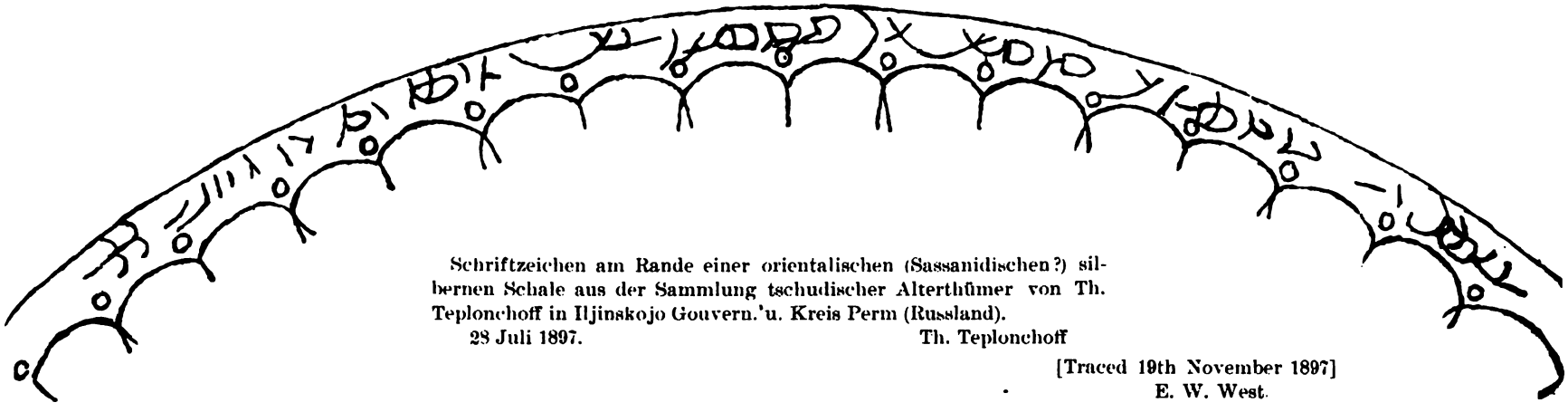
I enclose the copy of the bowl inscription, and have taken the liberty of keeping a tracing of it for my own use and reference.

Yours truly
E. W. West.

It is possible that Dr. West might later have modified in minor details his decipherment and transliteration, but I have presented his reading of the inscription in the form in which I have found it among his notes and will leave it to the small band of Pahlavi workers to see if they can add anything further to the interpretation.

Dr. West adds a note to the effect that the inscription is "apparently about 16 inches in diameter." See the next page.

A. V. W. J.



Schriftzeichen am Rande einer orientalischen (Sassanidischen?) silbernen Schale aus der Sammlung tschudischer Alterthümer von Th. Teplonchoff in Iljinskojo Gouvern.'u. Kreis Perm (Russland).

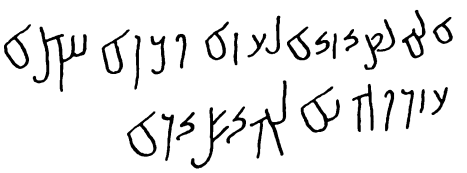
28 Juli 1897. Th. Teplonchoff

[Traced 19th November 1897]
E. W. West.

Epigraphic Notes.—By CHARLES C. TORREY, Professor in Yale University, New Haven, Conn.

1. An Inscription from the "High-Place" of the Goddess Al-'Uzzā, in Petra.

IN the summer of 1906, Mr. George Sverdrup, who had just completed a year of study in the American School of Archæology in Jerusalem, made a journey to Petra. During his stay there he and his companions discovered several new inscriptions; some of them Greek, the others Nabatean. One of the latter class, a copy of which he sent me, seems to be of more than usual interest. Mr. Sverdrup says of it: "It was found on the great staircase leading up to the altar mentioned in the article by Dr. Hoskins in the *Biblical World* for May, 1906. The letters are all quite distinct. The inscription is complete at the left; at the right some letters are probably missing, judging from the weathering of the rock. The letters are on the average about ten inches high." His copy of the inscription is here reproduced:



Mr. Sverdrup was unable to find any satisfactory interpretation of the beginning and the end of the first line; the first word of the second line, which he read עזר, also gave him trouble. He recognized the name of the goddess Al-'Uzzā. If I am not mistaken, the main source of the difficulty lies in a misreading of the letters which follow the name אלעזא, in the first line. Instead of [illegible] must not the true reading be [illegible], or else possibly [illegible]? Judging from what follows, a demonstrative pronoun is necessary at this point. The inscription would then read as follows:

* * אלמלקי די אלעזא ודנה בבתא
[די] עבד והבאלהי שירא

* * *The meeting-place of Al-'Uzzā; and this is the gateway* [*which*] *Wahbullāhi, the caravan-master, constructed.*

According to Mr. Sverdrup's copy, the seventh letter in the first line is ז. But as the relative pronoun זי is quite unlikely in a Nabatean inscription, I have conjectured ד.[1] As for the beginning of the first line, it may be that a demonstrative originally stood there; but of course it is possible that more is missing on the right than I have supposed. In all probability, the א is to be connected with the following, as I have indicated; we then have a genuine Arabic word, with the Arabic article, المَلْقَى, "the meeting-place," as the native name of this now famous sanctuary.

At the beginning of the second line, only the very slightest change from Mr. Sverdrup's copy is necessary in order to gain the reading עבד in place of עזר. The last word in the line I suppose to be שִׁירָא, and this was also Mr. Sverdrup's interpretation. The proper name Wahbullāhi, وَهْبُ اللّٰهِ, is already well known.

Below the right end of these two lines, at about the place where a third line would have begun, Mr. Sverdrup thought that he could see traces of the letters of a single word, which, he said, might be דכירין, though none of the characters could be made out with certainty. Of course this word, so common in Nabatean and Sinaitic inscriptions, may have been appended here either by the original hand or somewhat later. If it really belonged to this inscription, and was written with the plural ending, this would increase the probability that more is missing at the right hand, namely, the mention of some other person or persons. But in view of Mr. Sverdrup's uncertainty as to this word, it can hardly be taken into account.

---

[1] I have little doubt that the letter which Mr. Sverdrup read as ז really had originally the small additional stroke at the top which would have made it a ד. Future visitors to Petra may be able to settle this point. Of course the reading here carries with it the reading of the relative pronoun which I have conjectured at the beginning of the second line.

The "great staircase" on which the inscription was found is described as one of those which lead up to the "third high-place," discovered by Dr. Hoskins in November, 1905. That these stairways contained doors, or gates, appears from Dr. Hoskins' description of the first one which he found (*Biblical World*, May, 1906, p. 385): "At the point where we struck it the pathway enters a cyclopean cutting, . . . the entrance to which was once guarded and defended by *colossal doors*, as shown by the side walls, the sockets, and the cuttings for the lintel and the bars." Mr. Sverdrup says of the inscription that it was found "near the head of this same staircase, not more than a hundred feet from the top of the cliff." The word בבתא, "gateway," might refer (1) to a door which stood at the place where the inscription was found; or (2) to the door at the foot of the stairs, described by Dr. Hoskins; or (3) to the staircase itself. It is a piece of good fortune, at all events, that we now have an inscription telling us the name of the deity who was worshipped at this great high-place, and the local designation of the place itself, as well as the name of one of those who were foremost in the work of constructing it.

2. A Votive Statuette with a Phoenician Inscription.

Photographs of this statuette and a squeeze of the inscription were sent me by Professor Harvey Porter, of the Syrian Protestant College in Beirut, some time ago. His description of it is as follows (see the accompanying Plate): "The statuette has lost its head and shoulders. The figure is naked to the waist, but the drapery covering the lower part and the style of the whole clearly indicate a Baal or Zeus. It closely resembles the forms of this god found on the Phoenician and Greek coins, such as those of Alexander the Great or the coins of Tarsus under the Satraps. The eagle, usually borne in the right hand, here stands at the foot of the statuette, on the right. The fragment is 9 inches in height and 7 inches broad. It is of marble, and came from Sidon. The inscription is engraved in an incuse square on the back. The marble is somewhat weathered; there is also a defect in the stone which greatly obscures the first two letters in the first line, the second letter in the second line, and the third in the following lines."

This is evidently a genuine Phoenician antique. The inscription also is ancient; on this point, as in regard to the interpre-

tation of the statue, we may take Professor Porter's judgment as final, since he speaks as an expert of long experience. The statuette was undoubtedly a votive offering at the shrine of some god.

The most of the letters of the inscription (see the Plate) are perfectly clear, and no one of them is entirely obliterated; yet the interpretation of the whole is difficult. The following transcript is from a tracing made from the squeeze, the letters being just one half the size of the original.

The first two letters of the *first* line are almost entirely obliterated. The few remaining traces of the first letter seem to me to suggest י. If the long, but very indistinct, slanting line at the right could be regarded as part of this letter, then מ would be most probable. But it seems to me pretty certain that this line lies outside the inscription. The second letter was read as ת by Professor Porter, and this is possible. This part of the stone has been so badly damaged that the engraved lines can no longer be distinguished from the accidental ones. Judging from the marks which *now* appear, מ is also a possibility. The remaining letters of the line are all perfectly distinct.

In the *second* line, the first letter is pretty certainly ר, though it may be ר, and even כ must be admitted as a possibility. The second letter, which is badly damaged by the defect in the stone (see Professor Porter's description, above), might be ר—though in that case the top of the letter is not closed—or perhaps י. It could hardly be מ. The third letter is either כ or מ, according as the line across the top is taken as original or secondary. To me it appears to be secondary. In case it were original, the letter might possibly be ש, though this would be improbable. The fourth letter is either מ or כ, probably the

former. The fifth letter is נ; and it is followed by a numeral. Professor Porter read the latter as *4*, but the marks at the left look to me more like an accidental abrasion of the stone. In the squeeze they hardly appear at all. Still, Professor Porter may be right.

In the *third* line, the second and last letters seem to me to be י, though the small horizontal prong which I have indicated at the bottom on the right is not clear in either case. Its presence is not absolutely necessary, to be sure. The third letter in the line is destroyed. It might be ש, ע, ב (?), or possibly ת. The remaining four characters are certain.

In the *fourth* line, the second letter is probably נ, but might be ל; the third letter is probably מ, but might perhaps be ש.

I have fancied that I could see, both in the photograph and in the squeeze, traces of punctuation marks, namely periods used to separate the words. Such periods appear after the ע in the third line, and at the end of that line; also after the third letter in the last line. I have not been able to make them out elsewhere in the inscription, and it may be that their seeming distinctness in the places named is only accidental.

I offer the following transliteration and translation, as a first attempt at interpreting the inscription:

יתן רחעם ל
דרכמן 3
לישע · ראי ·
מנם · אל

R Ḫ'M presented these vessels, amounting to three drachmas, (in return) for the preservation of his eyesight.

The translation supposes that the statuette was not itself the principal offering, but that it merely accompanied the gift to the god, as often happened. The word מנים, like the Hebrew כלים, might have any one of several meanings; compare its use in the Tabnit inscription. I suppose the second line to give the sum at which these votive objects were purchased.

The combination רחעם, as a proper name, is quite possible, and capable of explanation in several ways; the first element of the compound, for example, might be רחה (=رخا, to live

in abundance), or a shortened form of רחב or רחם. The grammatical forms and constructions here supposed, moreover, all have their support in actual usage, Hebrew or Phoenician. The ' at the end of the third line I suppose to be the suffix of the third person singular.

This reading is the least objectionable of the half-dozen which have suggested themselves to me. If any one of my colleagues can find a better one, I shall be glad.

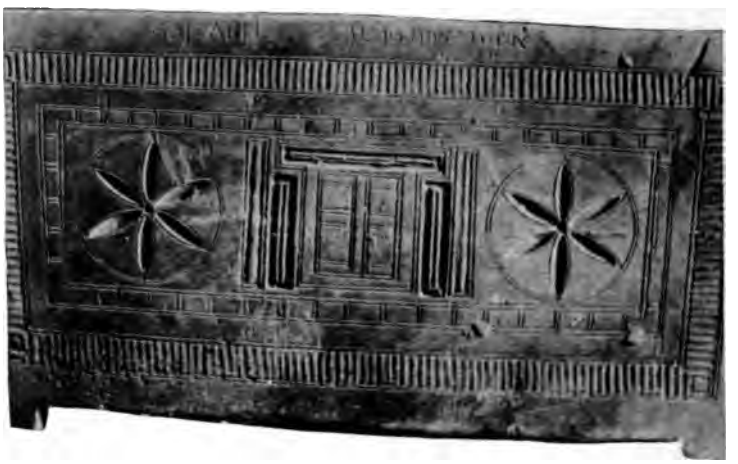
3. A Phoenician Seal.

The seal whose inscription is here reproduced is owned by a collector in Jerusalem. The accompanying facsimile is that of a cast made from a wax impression which was sent to me (see the preceding Plate). The characters are of a late type, and fairly well cut.

לאבעל
בן חנא

(*Seal*) *of AB'L, son of Hannā.*

The name אבעל, presumably אב־בעל or אבי־בעל, is already familiar as a Phoenician proper name. See Lidzbarski's Glossary, and also his *Ephemeris*, I, p. 35. The form of the נ, used both as a final and as a medial letter, is unusual and interesting. It is like the final ן which is common in the later Palmyrene script and appears occasionally elsewhere. The inversion of the ל which ends the first line is also to be remarked; such inversion occurs not infrequently both on seals and on coins. In general, the type of the characters employed is late Palestinian.



Some Hebrew and Phoenician Inscriptions.—By HANS H. SPOER, Ph.D., American School of Archaeology, Jerusalem.

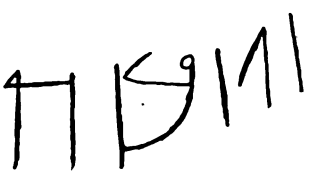
I. New Ossuaries from Jerusalem.

A. *Ossuaries in the German Benedictine Convent.*

THROUGH the kindness of the Rev. P. Cornelius, the Prior, and the Rev. P. Mauritius of the German Benedictine Convent at Jerusalem, I am enabled to publish the following inscriptions found upon ossuaries now in their possession. I wish to express my thanks to them for the interest they have taken in this matter.

The ossuaries were found southeast of Jerusalem, not far from the site of "Schick's amphitheatre." Most of the inscriptions are, as is commonly the case on ossuaries, bilingual. Father Mauritius proposes soon to publish an account of the specially interesting tomb in which most of these ossuaries were found, including another now in the possession of the Convent of St. Anne at Jerusalem; see the *Revue Biblique* 1904, p. 263. This tomb has the rare distinction of being closed by a rolling stone.

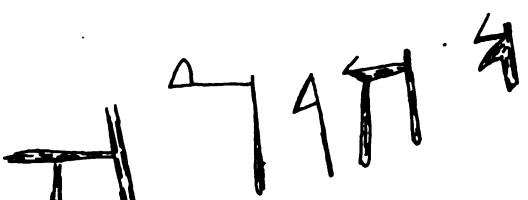
1.



יויכיח

This is apparently יוֹיָכִיח, *Yōyākīḥ*, cf. יויריב.

2.



יהודה

The name *Judah* is found on several ossuaries.

3. This inscription (see the Plate) is on the upper edge of the ossuary.

ΜΑΡΙΑΜΗ — מרים אתת יחקיה

מרים אתת יחקיה

Mariame — *Miryam wife of Yahqiah*

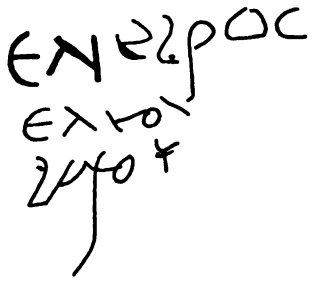
4. Inscription (see the Plate) placed as in No. 3.

ΕΛΙϹΑΒΗ — אלושבע אתת טרטן

אלישבע אתת טרפון

Elisabeth — *Elisabeth wife of Tarpōn*

5. These inscriptions are written in the right and left upper corners of the ossuary:



ΕΛΙΕΖΡΟΣ — אליעזר

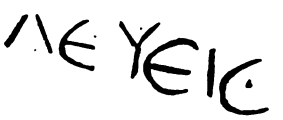
ΕΛΕΑΖΑΡΟΥ — בן לוי

Eliezer the son of Eleazar — *Eliezer the son of Levi*

It would seem that this ossuary has been the depository for two bodies.

For the curious א cf. Lidzbarski, *Ephem.* II. p. 196, the א of אבה. The name אליעזר appears without ' on the ossuary published in the *Rev. Bibl.* 1904, p. 263.

6.

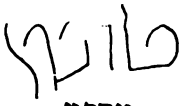


לוי

ΛΕΥΕΙΣ

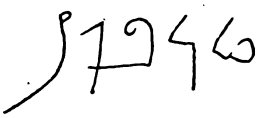
Levi

7. Crosswise upon the lid is found the name 

and lengthwise  .

טרפון

The same names occur, one on each side of the ossuary.

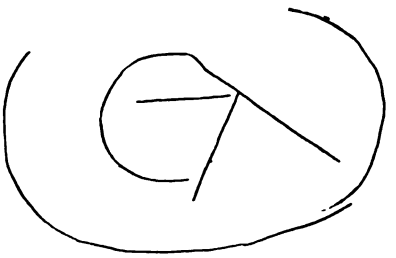


It may be that this *Tarpōn* was the husband of the woman mentioned in No. 4.

8. On a broken lid of an ossuary is found the inscription

יהוחנן בר

9. This monogram



is on one side of a roof-shaped lid. It may possibly stand for ΕΛΙΣ[ΑΒΗ]; the first four letters can easily be made out. On the other side of the lid are the letters

10. On a stone slab which formerly closed one of the loculi is written in black the name

11. On another slab, which served the same purpose as No. 10, being, however, covered with a thick layer of mortar, were made with the finger in the mortar, while it was still soft, the following letters:

B. *An Ossuary from the Mount of Olives.*

On an ossuary recently discovered on the Mount of Olives, and now in the possession of an English gentleman, is found the following inscription:

מרתה

The words are found on the opposite extremities of the ossuary. The letters are from one to two inches in height and very crude, although more deeply cut into the stone than is usual. The name מרתה=מרתא occurs elsewhere on an ossuary described by M. Clermont-Ganneau.

2. A Phoenician Seal.

This seal, found at Sidon, and now in my possession, is so much worn that the first letter of each line is almost obliterated; see the Plate, p. 355. It reads:

לאבגדי
יזחקו

That portion of the stone which presumably contained the letter ל is now completely worn away.

[In the second line, the first letter can hardly be י; and is not the last letter י rather than ו? The fourth letter cannot be ק, and is probably ל; see the similar forms in Euting's *Tabula scripturae aramaicae*. A second impression of the seal, just received from Dr. Spoer, shows plainly a closed loop at the top of the last letter in the first line. That is, it is either ב or ר.

I believe the reading to be:

[ל]אבגדב
ן זחלי

אבגד like אבבעל; for זחלי we might compare the Arabic *Zuḥal* (Saturn), and the problematic זחלת of the Old Testament. Ed.]

Aspects of the Vedic Dative.—By E. WASHBURN HOPKINS, Professor in Yale University, New Haven, Conn.

1. Dative and Genitive after bhū and ásti.

IN a previous paper[1] I have sufficiently illustrated the use of the dative after bhū as equivalent to "come," e. g. bhuvad vīryāya, "came to power," and in this sense, interchangeable with a regular verb of motion, bhava, "(be-)come (to help)," and ā́gahi, "come (to help)." Whereas bhū, even in the indicative, with an objective dative of this sort is not uncommon (bhū with the genitive is rare), ásti in the indicative is normal with the genitive and rare with the dative.[2]

Thus in 5. 65. 4, mitrásya hí.. sumatír ásti vidhatás, if vidhatás is not in agreement with mitrásya (cf. 8. 78. 7, krátva ít pūrṇám udáraṁ turásyā 'sti vidhatás), the normal construction is found, but in 6. 65. 4, idā́ hí vo vidhaté rátnam asti, the construction is abnormal for RV. The perfect āsa has only possessive genitive after it, and this is the case with the imperfect āsīt. In 5. 30. 15, gharmás cit taptáḥ pravṛ́je sa āsīt, the meaning is evidently (not "came to" but) "was heated

---

[1] *The Vedic Dative Reconsidered*, Trans. Am. P. Ass., vol. xxxvii, p. 87 ff. Here, as there, to avoid confusion with English 'as,' I write, ásti. References, unless otherwise marked, are to RV.

[2] As with other verbs of movement, the locative takes the place of the dative after bhū in AV. 15. 11. 11, nikāmé nikāmásya bhavati. That bhavati here is not simply "is" may be seen from the preceding āínaṁ nikāmó gacchati, "Unto him comes his desire and he comes-to-be-in (gets to) the desire of desire." Compare, after máhyam pavatām, loc. kā́me in RV. 10. 128. 2, but dat. kā́māya in the same phrase, AV. 5. 3. 3, "May (the wind) blow for me unto (at) my desire." The fact that jāgṛhi, "watch," takes either dat. or loc. shows that both are felt in a similar relation, though the meaning varies as in "look out for" and "watch over" (cf. also ádhi with loc. after the same verb). We cannot assume that one (loc.) object is felt as such and the other (dat.) is a vague "in regard to." There is here no difference of personal dat. and impersonal loc.; vayodhéyāya, gā́rhapātyaya, 10. 25. 8 and 85. 27 are abstract datives, "watch to give strength," "look out for the housekeeping," but prajā́sv ātmásu góṣu jāgṛhi, AV. 3. 15. 7, "watch over us," etc., loc.

unto" (for); in 10. 34. 2, śivā́ . . máhyam āsīt, the dative of course depends on śivā́; in 10. 102. 6, kakárdave vṛṣabhó yuktá āsīt, the traditional interpretation makes the dative final. There is no instance where āsa or āsit, "was," is used, as are the preterites of bhū, "(be-)came," with an object-dative. In the present indicative there are a few cases of stereotyped character, where ásti and sánti are employed with the dative, as given in the note below.[1]

---

[1] The dative after the present of ásti seems to be almost restricted to instances evidently influenced by the prevailing use of certain nouns meaning "aid, protection, gifts," with verbs of giving, becoming, etc. Thus, like the rare exception (above) vidhaté rátnam asti, there are a few examples of the worshipper in the dative with santi, where the subject is "gift, help," etc. The regular and prevailing use of the word várūtham, for example, is after a verb meaning "become" or "extend" (protection to the worshipper). Thus 1. 58. 9, bhávā várūtham gṛṇaté; 1. 23. 21, pṛṇīta . . varūtham tanvè máma: 7. 30. 4, yácha sūríbhya upamám várūtham; 7. 88. 6, yandhí . . stuvaté várūtham; 8. 72. 3, yantā́si várūtham (with dative and ablative, "protection to thy servitors from thy haters"). It is in accordance with this that we find, in one hymn only, téṣām hí . . várūtham ásti dāśúṣe . . yád vaḥ . . sunvaté várūtham ásti, 8. 67. 3 and 6 (but agnír várūtham máma, "Agni of me the protection," in 1. 148. 2; so in 7. 32. 7). With "gift," dádhāti rátnam vidhaté, 4. 12. 3, may be the model for vidhaté rátnam asti; as ábhūd u vo vidhaté ratnadhéyam idā́ naro dāśúṣe mártyāya, 4. 34. 4, for ratnadhéyāni santi . . sudā́se, 7. 53. 3; yáthā hy ásti te . . rātiḥ . . dāśúse, 8. 24. 9. Yet it is more likely that the verbals dhā, rā, help to produce the dative, since "bestow" and "give" regularly call for this case. There are, however, a few examples in which this does not apply: yā́ te santi dāśúse ádhṛṣṭā gíras, 7. 3. 8; evā́ hí te víbhūtaya ūtáyas . . sadyā́ś cit santi dāśúṣe, 1. 8. 9; sóma yā́s te mayobhúva ūtáyaḥ sánti dāśúṣe, 1. 91. 9; yā́ vām sánti puruspṛ́ho niyúto dāśúṣe narā, 4. 47. 4; yā́ vaḥ śárma śaśamānā́ya santi, 1. 85. 12. Though here "give to" or "become to" (the pious) a guard (śárma) is also a common phrase, 1. 58. 9, etc. Of another sort are the datives with santi in 9. 61. 30, yā́ te . . āyudhā tigmā́ni santi dhū́rvaṇe; 10. 44. 7, yé prā́g úpare sánti dāváne; 9. 78. 2; srutáyaḥ santi yā́tave, "which weapons are sharp to hurt," "who are late (?) to give," "paths are to go." These are generally introduced by the imperative (future), pā́tave sómo astu, 1. 108. 2; santu . . rákṣase hántavā́ u, 5. 2. 10 (etc., see more examples below). In Avestan also the dative after 'be' is usually after a form of future sense, nairē aṅhat, "will be to the man"; mōi astu, "be to me," etc., but the possessive dative with the indicative or even without verbal form, "these are to me," "the flames to (= of) fire" (*Casuslehre*, p. 220) is also found.

On the other hand, those modal forms of ásti which (like bhū in any mode) indicate not being but going to be (becoming) take a dative which may be final or may indicate that the subject will be (i. e. is coming to) the dative object. There are, for example, scarcely any cases like that with vidhaté and ásti above, but not uncommon are such cases as 6. 68. 7, suríbhyas . . . rayíḥ syāt, "wealth shall be (=come) to the Sūris," and 1. 8. 5, mahitvám astu vajríṇe, "greatness shall be (=come) to the bolt-holder." A good example of the future sense is given by 10. 7. 4, dyúbhir asmā áhabhir vāmám astu, "happiness shall be to him through (all) his days." So in 1. 147. 4, púnar astu so asmāi, where the subject is a curse which "shall return to him"; and in 4. 1. 8, dhiyé satyám astu is "the prayer shall be realized," literally, "reality shall be (come) to the prayer."[1]

Other examples of the future sense of ásti (in imperative, subjunctive, optative) parallel to bhū are: asad vṛdhé, 1. 89. 5; syāma vṛdhé, 8. 63. 10; edhi no vṛdhé, 5. 9. 7; 10. 7; 16. 5 (the only case, being a repeated phrase, of edhi with final dative);[2] rāyáḥ syāma dharúṇaṁ dhiyádhyāi ("may we get to establish wealth's foundation"), 7. 34. 24; syāma bhúvaneṣu jīváse, 9. 86. 38; syāma te dāváne vásūnām, 2. 11. 1 (cf. 12 and 10. 36. 12); dānā́ya mánaḥ . . astu te, 1. 55. 7 (cf. máno kṛṣva, "make up your mind to" with vasudéyāya, 1. 54, 9; AV.

---

[1] In 6. 52. 2, tápūṅṣi tásmāi vṛjinā́ni santu, "his sins shall come as burnings (torments) to him" is in connection with the associated phrase, 3, "cast the burning weapon at him who hates the Brahman" (dative). Compare AV. 4. 18. 6, cakā́ra bhadrám asmábhyam ātmáne tápanaṁ tú sás, "he made good for us, but for himself a burning." Any modifier may of course bring out the dative, irrespective of the verb, as in 7. 20. 5, prá . . yáḥ nṛ́bhyo asti; 10. 15. 2, pitṛbhyo námo astu; and so in 1. 109. 1, nā́'nyā́ yuvát prámatir asti máhyam, the dative depends not on the verb asti but on prámati, just as in the verbal form, prá manmahe śavasānā́ya śūṣám, 1. 62. 1 (in 10. 100. 11, prámati takes the genitive, "care of" for "care for"). In 1. 91. 15=7. 55. 1, sákhā suśéva edhi nas, if nas is dative it depends on the adjective; so in suhávo na edhi, 4. 1. 5 (cf. 6. 52. 6).

[2] In contrast with asmā́kam íd vṛdhé bhava, 1. 79. 11; no vṛdhé bhava, 1. 91. 10; bhávā naḥ . . sákhā vṛdhé, 1. 91. 17; bhávā stotṛ́bhyo ántamaḥ svastáye, 3. 10. 8 (cf. 8. 13. 3); bhávā naḥ śubhra sātáye, 5. 5. 4; bhávā sumátsu no vṛdhé, 6. 46. 3 (and 11); bhávā vṛdhá indra rāyó asyá, 7. 30. 1; śivó bhava . . vā́jasātaye, 8. 4. 18; rucé bhava, 9. 105. 5, the solitary instance with edhi (above) is typical.

3. 4. 4); asat ta utsó gṛṇaté, 9. 89. 6 (the only case of this subjunctive, in the ninth book); té syāma devávītaye, 10. 35. 14; tád vām astu sáhase . . śávas, 7. 104. 3; víśvā stotṛbhyo gṛṇaté ca santu (sāúbhagā), 7. 3. 10; víśvāhā 'smāi śaraṇā́ santv átra, 10. 18. 2. Cases of doubtful forms are common: vṛṣṭáyaḥ santv asmé, 7. 101. 5; sumnám asmé te astu, 1. 114. 10 (5. 53. 9); astu dráviṇam . . asmé, 10. 35. 13; té naḥ santu yújas, 8. 83. 2; tán naḥ pratnáṁ sakhyám astu yuṣmé, 6. 18. 5; etc. In the following cases the dative depends only vaguely on astu, "be (resting) in the heart to," ayáṁ sú túbhyam . . hṛdí stóma úpaśritaś cid astu, 7. 86. 8; (vo astu) ayáṁ ca sómo hṛdí, 10. 32. 9; idáṁ vácaḥ parjányāya . . hṛdó astv ántaram, 7. 101. 5. When the genitive is found it is possessive, not objective, as in 10. 103. 4, asmā́kam edhy avitā́ ráthānām (not "be to us"). So in nā́'smā́kan asti tát táras . . atiṣkáde, "the strength of us is not to be conquered," not "strength is to us," 8. 67. 19; and in 5. 28. 3, táva dyumnā́ny uttamā́ni santu; 10. 51. 9, táva . . santu bhāgā́ḥ, távā 'gne yajñás . . astu; 1. 39. 2, yuṣmā́kam astu táviṣī pánīyasī, the idea is not "greater glory shall (be) come to thee," etc., but "thy glory shall be greater." This point is frequently disregarded. In 1. 173. 10, asmā́kā'sad indro vájrahastas, the meaning is not "unser (or bei uns) wird Indra sein, der den Keil hält," but "our Indra shall be a bolt-holder." In 8. 2. 7, tráya índrasya, etc., translate "Indra's somas shall be three"; in 1. 7. 10 (13. 10), asmā́kam astu kévalas, "all ours shall he be"; in 8. 31. 3, tasya dyumā́n asad ráthas, "his car"; in 8. 89. 4, śrávaś cit te asad bṛhát, "great be thy glory." This possessive genitive is the regular construction with ásti as it often is with astu, in distinction from the sense with the dative and astu. Thus, asmā́kam santu bhúvanasya gopā́s, 7. 51. 2, not "to us come," but "ours be"; té asya santu ketávas, 9. 70. 3, "must be his beams"; taśya bhrā́tā madhyamó asti, 1. 164. 1, "his brother"; ná . . brahmáṇām ṛṇám . . asti, 8. 32. 16, "no debt of"; yásya . . vṛtrahā́ śúṣmo ásti, 1. 100. 2, "whose strength is foe-killing"; yá āmásya kravíṣo gandhó ásti, 1. 162. 10, "what smell is of flesh"; yá eṣām . . mahimā́ satyó ásti, 1. 167. 7, "what greatness of them is real"; ná yásya (asya) vartā́ . . ásti, 1. 40. 8; 4. 20. 7; 6. 66. 8; te rā́dhasas, 8. 14. 4 (so te in 5. 29. 14, ná te vartā́ . . asti, must be genitive); sárvaṁ tád astu te ghṛtám, 8. 102. 21; távet tát satyám (1. 1.

6), *sc.* asti, and cf. táva tát satyám astu, 1. 98. 3; tán nú satyám pávamānasyā'stu . . jyótir yád áhne ákṛṇot, etc., 9. 92. 5.

In marked contrast, the genitive with bhū is as uncommon as it is common with ásti. I have found only 2. 24, 14, bráhmaṇas páter abhavat . . satyó manyús; 10. 142. 3, khilyā́ urvárāṇām bhavanti; 10. 130. 4, agnér gāyatry àbhavat sayúgvā; 4. 7. 2, ágne kadā́ ta anuṣág bhúvad devásya cétanam; 6. 16. 18, nahí te pūrtám akṣipád bhúvan nemānām vaso (a doubtful construction).[1] I think all these are really independent of bhū, not as with the dative after bhū, the object of the verb. Thus: "Bṛhaspati's anger became real," (not "ihm ward"); (when the fire burns) "there arise bare spaces of (=between) the fields"; "the gāyatrī became Agni's yoke-fellow"; "when will be the appearance of thee" (so Ludwig), not "wann wurde . . dir," etc. In 10. 61. 23, víprah préṣṭhah sá hy èṣām babhū́va, "priest dearest to them he became," has the same construction with préṣṭha as in 1. 167. 10, vayám adyé'ndrasya préṣṭhās, and makes it unnecessary to take the genitive with bhū even as partitive, "became (one) of them" (Grassmann). The only case where the objective genitive with bhū seems to be required is 1. 17. 4, yuvā́ku hí śácīnām yuvā́ku sumatīnā́m bhūyā́ma vājadā́vnām, "may we become of your generous goodwill," where the genitive is felt as a sort of partitive objective, "may we get to share in your good will." PW. assigns to this category 10. 40. 3, kásya dhvasrā́ bhavathas, but it is clear that the genitive depends on dhvasrā́ as substantive (so S.), and this case is on a par with asmā́kam avitā́ bhava, 1. 187. 2, "become our helper," or bhávā várūtham maghavan maghónām, 7. 32. 7, "become the guard of the Maghavans," and such instances (the genitive being probably independent of bhū), which are unnecessary to take into consideration. In later Vedic style this construction of the genitive as a possessive became felt as an objective and "of him an hundred wives arose" is equivalent to "came to him." There is thus a distinction between dative and genitive after bhū which is unhistorically expressed in PW. as "mit gen. (selten dat. loc.) der Person." The RV. construction is prevailingly dative (loc.), the later construction is

[1] Doubtful also (genit. or dat.) is the case of vas in 4. 36 3, tád vas . . devéṣu vibhvo abhavan mahitvanám. So 4. 51. 4: te, 1. 162. 21; me, 10. 40. 5.

prevailingly genitive. Examples of the RV. datival usage may be found in my former article, p. 99; for the later genitival construction, compare, e. g., BAU. 3. 1. 1, Janakasya vijijñāsā babhūva, kaḥ svid, etc., "a desire to know came to Janaka" (became of), and PW. s. bhū, col. 315.

Some doubtful cases of ásti may be settled by parallels. With dyúbhir hitó jarimā́ sú no astu, 10. 59. 4, compare dyúbhir asmā áhobhir vāmám astu, 10. 7. 4. With ásti hí te 'gne devéṣv ā́pyam, 1. 36. 12, cf. yáyor ásti prá naḥ sakhyáṁ devéṣv ádhy ā́pyam, 8. 10. 4, and ágne táva tyád ukthyàṁ devéṣv asty ā́pyam, 1 105. 13 (similar forms in the same sort of clause in 7. 32. 19; 8. 27. 10). In such a case as 10. 100. 10, "body be medicine of body," tanvò astu are not connected but tanvò . . bheṣajám. In samānám astu vo mánas, 10. 191. 4, the vas is to be compared with máma . . astu = me astu in 10. 128. 2 and 4. So vayáṁ te (smasi) 8. 66. 13 is to be compared with smási . . eṣām, 1. 37. 15. Irrespective of ásti the word śám governs the dative, 10. 165. 1–4; 7. 35. 2, 3, 7 (śám astu te hṛdé, 8. 17. 6; bháva naḥ . . śáṁ hṛdé, 8. 79. 7), so that in such a case as 5. 11. 5, túbhye 'dám agne mádhumattamaṁ vácas túbhyam manīṣā́ iyám astu śáṁ hṛdé (cf. 5. 63. 1, tásmāi vṛṣṭír mádhumat pinvate divás), the dative depends on two elements besides the adjective, the verb, and the noun śám, either one of which might have produced it.[1] Compare sutá índrāya . . kaláśe akṣarat, madhumāṅ astu vāyavé, 9. 63. 3; tébhyo bhadrám . . vo astu, 10. 62. 1 (in 10. 80. 2 the genit. is possessive); śivā́ḥ . . santu śáṁ hṛdé, AV. 8. 7. 17. With bhadrá the dat. interchanges with the locative, 1. 113. 9 and 20, but in both cases there is the verb to reckon with also, devéṣu cakṛṣe bhadrám ápnas, ápna uṣáso váhantī 'jānā́ya . . bhadrám. So in 1. 1. 6, dāśúṣe is caused by kariṣyási as much as by bhadrám. On the other hand, in 7. 20. 10, vásvī ṣú te jaritré astu śaktís, "good to the singer be thy strength," the dative depends more on the adj. than on the verb; cf. 6. 16. 25, vásvī te agne sáṁdṛṣṭir iṣayaté mártyāya, without verb. In 1. 73. 10, ucáthāni . . júṣṭāni santu mánase hṛdé ca, the dative "mind and heart" (equivalent to a personal form; cf. the same expression in 4. 77. 2)

[1] So in 1. 189. 2, bhávā tokā́ya . . śáṁ yós : 5. 47. 7, tád astu . . śáṁ yór asmábhyam, etc. On the other hand, in 5. 74. 9, śám . . vām . . asmā́kam astu carkṛtis, is "our praise of you shall be weal."

depends on júṣṭāni rather more than on the verb. It is to be observed that kar has the same effect as ávah, "bring hither to,"[1] with an infinitive (interchanging in the same phrases) and that the infinitive itself is indistinguishable from a noun in various forms, e. g. mártān yajáthāya kṛṇván, "making men to (the) sacrifice," 10. 12. 1 (ā́ devā́n yajáthāya vakṣi, 3. 4. 1); sá no jīvā́tave kṛdhi, "make us to live," 10. 186. 2; máhi nas kṛdhi saṁcákṣe bhujé asyāí (inf. and noun), 1. 127. 11; tád amítrebhyo dṛśé kuru, "this make to our foes to see," AV. 11. 9. 1. Cf. AV. 9. 2. 11, urúṁ lokám akaran máhyam edhatúm . . máhyaṁ ṣáḍ urvī́r ghṛtám ā́ vahantu; AV. 10. 5. 50, "I hurl at him the bolt to head-splitting," asmāi vájram prá harāmi . . śīrṣabhídyāya, i. e. to split his head. While RV. has inf. yudháye, 10. 84. 4, AV. has ptc. noun yuddhā́ya, 4. 31. 4, in the some clause, "sharpen the clans to (the) fight;" cf. AV. 5. 14. 9, "we sharpen thee not vadhā́ya (ácakruṣe), to killing" (RV. 1. 61. 13, inf. yudhé = AV. 4. 24. 7, noun, yudhé?). There seems to be no real difference between such datives and that in jyótir yád áhne ákṛṇod u lokám, 9. 92. 5, urú kṣáyāya nas kṛdhi, 8. 68. 12 = AV. 7. 26. 3.[2] One "cooks for (to) him" or "cooks for (to) releasing," yám pácati riprā́n nír muktyāi, AV. 12. 3. 5, just as one "comes to kill" or "comes to birth," janúṣe, or "comes to me."

The dative of the type θαῦμα ἰδέσθαι may be filled out with another dative of the person, máyaḥ pátibhyo jánayaḥ pariṣváje, "wives, a pleasure to husbands to embrace," 10. 40. 10.[3] It is

---

[1] A good case of local dative after "bring, bear," is found in AV. 13. 1. 1, when, after rāṣṭrám prá viśa, "enter thy kingdom," follows sá tvā rāṣṭrā́ya súbhṛtam bibhartu, "may he bear thee, well borne, to thy kingdom" (not "to kingship": právis is local, enter a place, etc.).

[2] Cf. also in the verse cited, 9. 92. 5, dásyave kar abhī́kam, "made front (attack) against the foe" (dat.), literally a "turning toward," abhí, which thus comes as near to governing a dative as is possible.

[3] The preceding vāmám pitṛbhyo yá idáṁ sameriré may owe its dative to sameriré rather than to vāmám, which is never followed by the dative, except with the idea of coming or sending, as in 10. 7. 4, asmāi . . vāmám astu (cf. 6. 71. 6; 7. 78. 1; 8. 83. 4; 10. 42. 8). The datives in the preceding vs. 9 are worth noticing: āsmāi rīyante nivané'va síndhavo 'smā́ áhne bhavati tát patitvanám, "to him as into valleys run the rivers . . to him by day (cf. vs. 5, bhūtám me áhne) comes this marriage." Cf. p. 97 of my former article.

to be observed that the personal dative stands on a par with the infinitive, as in svàr dṛśé, "a light to see," 1. 50. 5, and in vápus . . cikitúṣe, "a wonder to the wise," 6. 66. 1 (but astu follows). In 1. 23. 21 (where tanvè máma = máhyam), "supply a guard to me and long to see the sun," jyók ca súryaṁ dṛśé, the dative is really final.

Interchange with the locative, as after verbs "bestow," "put," etc. (illustrated in my former paper),[1] is found in syāma váruṇe ánāgās, "may we be with (before) Varuṇa sinless," 7. 87. 7, as compared with ánāgaso áditaye syāma, "may we be to Aditi sinless," 1. 24. 15; sádā tvé sumánasaḥ syāma, 7. 4. 7, as compared (probably) with asmé, 10, 100. 4, and with pratyáñ naḥ sumánā bhava, 10. 141. 1. With "help," "goodwill," etc., the locative is the normal construction, ávasi syāma, "may we be in (his) good will," etc., 5. 65. 5; 7. 18. 3; 8. 44. 24, etc.[2] It may be noticed here that syāma is joined with a ptc., táranto víśvā duritā́ syāma, "may we be crossing difficulties," 10. 31. 1, and so with the dat. túbhyaṁ devā́ya dā́śataḥ syāma, "may we be serving (to) thee the god," 7. 14. 3 (so té te devā́ya dā́śataḥ syāma, 7. 17. 7; cf. 7. 37. 4, vayáṁ nú te dāśvā́ṅsaḥ syāma), which depends partly on the ptc. and partly on the verb (cf. túbhyam bhavema, cited in my former paper).

2. Ūtí and other forms with bhū.

Like ájagann ūtáye, 1. 130. 9; ā́ cakrur agním ūtáye, 3. 27. 6, is bhávā (ūtáye) ūtí. It is a mistake (*Grundz.* iii. 192) to explain ūtí as conditioned by "the position at the end of the pāda." Compare 6. 24. 9, sthā́ ū ṣū ūrdhvá útí ārisanyan, not final position, yet dative; as also 6. 29. 6; 7. 25. 1 (ā́ pátāti); 8. 99. 7 (itá ūtí); 10. 15. 4; 10. 104. 4. To determine the case of ūtí some parallels may be given. I begin with 'call,' etc.

---

[1] Compare AV. 10. 7. 39. where vímite (loc.) seems to refer to yásmāi (dat.) in the same clause. Another example is found in the Pp. loc. reading sūyámā gṛhéṣu for the dat. (vulgate) suyámā gṛhébhyas, AV. 14. 2. 17.

[2] The interchange of acc. and dat. after compounds meaning "help, encourage," is to be noticed, e. g. úpa-av takes either dat. or acc. like "do good to" (below). "Conciliate to," caus. sáṁ-van, AV. 6. 9. 3, takes indirect dat. object.

After "call (to)" three favorite datives are found in 1. 35. 1, svastáye, ávase,[1] ūtáye; índram ā́ huve ūtáye . . marútaḥ sómapītaye, 1. 111. 4; ūtáye vā sutapéyāya vā, 4. 44. 3. The infinitive after "wish": índram uśmasī 'ṣṭáye and brahmotáye, "we wish Indra to further (and) favor our prayer to aid (us)," 1. 129. 4; cf. avatū'táye nas, 6. 9. 7. After "choose": "we mortal friends choose thee, a god, to aid" (us), 3. 9. 1; so 8. 6. 44; 8. 83. 1, tád (ávas) ā́ vṛṇīmahe vayám . . asmábhyam ūtáye, "choose that help to aid (to) us." So with "beg," ī́ḷata ūtáye, 7. 94. 5; "flow forth" to aid, 9. 66. 4. The "final dative" (purpose) is quite indistinguishable from the concrete dative here, one overlaps the other; "bring food to aid," 8. 60. 18; "come, bring food, to aid," 8. 1. 4; "drink to aid," "praise to aid," etc., 3. 37. 8; 14. 2; 4, 32. 2; 8. 5. 4; 21. 9. The double object (dat. or acc.) is common: "you get to aid (to) the singers," babhūtha jaritṛbhya ūtī́, 1. 178. 1; na ūtáya ā́ yātaṁ sómapītáye, 4. 47. 3; índram ūtáye gus, "came after help," 1. 104. 2; tvā devám, . . ūtáye te 'vasa iyānāso,[2] amanmahi, "coming after help and aid," 5. 22. 3 (5. 5. 5, "easy to approach to aid"). Ordinarily the god "gets to aid" the suppliant, as in 8. 68. 1, "we cause thee to turn hither toward (our) good like a war-car to help." So in 8. 88. 4. "turns thee to aid," 8. 92. 7, "drive (the god) hither to help."

Not "are" but "(we) work" is to be supplied in the phrase yáthā ta ūtáye, 5. 20. 4. The dative in 10. 126. 3, is influenced by náyiṣṭhā u no neṣáṇi, "best leaders in leading" (áti dvéṣas is only refrain). Or "come" may be supplied. At any rate, the simple "be" forms are rather carefully avoided, as not one stands after "be" alone out of the hundred odd cases of dative ūtáye (ūtī́). Hence the dat. has local force. Half a dozen instances registered by Grassmann may be instrumental; yuṣmā́kotī . . ā́gata, etc.; in 10. 35. 13, víśva ūtī́ bhavantv agnáyas followed by ávasā́ gamantu; 8. 97. 7, bhávā nas . . ūtī́, but cf. 10. 61. 27, bhūtā́ devāso ūtáye "(be) come to aid."

---

[1] The seven cases of ávase "to aid" in AV. are all after "call," e. g. tā́ asmā ávase huve, "I call those to aid him." This verb later takes acc. "call one," or loc., "call to bed," "to battle," etc.

[2] Compare túbhyam . . gíras . . iyānā́s, "songs going to (after) thee," 10. 104. 1.

That the dative is used after bhū as it is after ā́gam can not be doubted. With "go" itself the claim that the dative represents reference even in the vernacular and epic Sk. (vanāya gacchati as "goes with a view to forest life") is refuted by coördinate usage, e. g. in Mbh. 5. 72. 25, 34, grāmāya . . vanāya . . nāśāya pravavrajus . . narakāyāi 'va gacchati, and the fact that pravraj takes also acc. or loc. as well as dat. "forest." Other verbs implying movement of the same sort are vardh (as illustrated in the preceding paper) and its radical cognate ūrdhvá, e. g., śruṣṭáye devá ūrdhvás, "the god erect (has raised himself for all) to hear," 2. 38. 2, as in the preceding verse he "rises to arouse" the world. Generally the two notions are united, ūrdhvás tiṣṭhā na ūtáye, "stand up to help us," 1. 30. 6; yásya tvám ūrdhvó adhvarā́ya tíṣṭhasi, "whose rite thou standest erect to" (aidest), 8. 19. 10. The counterpart of this is "make erect" (to), both being combined in 1. 36. 13–14: "stand up (erect thyself) to help us; make us erect to act, to live"; compare erectus ad agendum.[1] Compounds of sthā are used in the same way: yád . . samásthithā yuddháye śáṅsam āvíde, "when you arose to fight and get glory," 10. 113. 3 (like "lead to fight," yád yudháye saṁnáyāni, 10. 27. 2). One of the cases of final dative with ásti really depends on the same idea, sthirā́ vaḥ santv āyudhā parāṇúde, "your weapons be steady (stand) to strike aside," 1. 39. 2; as the implication is found in sthā alone, túbhye 'mā́ bhúvanā kave mahimné soma tasthire, "stand to you unto (for) greatness," 9. 62. 27. Compare atasthāno vā eṣa tasmāi yad, "does not stand to (submit to) this, *viz.* that," ŚB. 12. 5. 5. 2; na dvitīyāya tasthus, "they do not stand for another (god)," Śvet. Up. 3. 2, *id est*, they "stand for Rudra alone," as we say, "I will stand to that." So ἐς τὴν στάσιν ἔστημεν, Hd. 9. 21; "stationed to" (for) ἐς ἀρχήν,

[1] Although harṣ (horreo) is used of bristling, the hairs standing erect in joy (Sk.) or horror (Latin), yet harṣate comes rather under the class of verbs meaning "be pleased," followed by a dative infinitive, harṣasva dā́tave, etc., 8. 19. 29; 10. 112. 1 (cf. jujoṣa, 4. 24. 5). Also (caus.) "excite" to. Of these verbs, note that mud and gardh, "desire after," take the loc., and that the later tuṣ, "pleased," takes the genitive, the instrumental, and the locative (of person as well as of thing), and the acc. with prati, besides the dative.

3. 80; Latin sententiae stare.[1] The same notion[2] is conveyed by the (middle voice of the) verb yam, as in 9. 86. 30, túbhya . . yemire, "they hold themselves to thee"; 1. 135. 1, túbhyaṁ hí . . devā́ devā́ya yemiré, "to thee, the god, the gods hold themselves" (stand true), as the same form may mean "hold oneself to" in the meaning "offer," "yield," with dative, thus having the same construction with other verbs "yield." The stanza 5. 32. 10 reads:

ny àsmāi devī́ svádhitir jihīta índraya gātúr uśatī́'va yeme
(sáṁ yád ójo yuváte víśvam ābhir) ánu svadhā́vne kṣitáyo namanta,

"withdraws (yields) to . . offers itself to . . bow to (Indra)." In 1. 37. 7, ní vo yā́māya mā́nuṣo dadhrá ugrā́ya manyáve, "man brings himself down to your course and mighty wrath" is followed by jíhīta párvato giríṣ, "the mountain yields," both taking the same dative (as in 8. 20. 6).[3] Something like nídhar is nísad, "sit down," used with locative, ní duroṇé . . sasāda, "sits down in the home" (of the fire as priest), 3. 1. 18; in causative, vikṣú hótāraṁ ny àsādayanta, "established (fire) among the clans as priest," 10. 7. 5; and causative with the dative, tvā . . ní hótāraṁ sādayante dámāya "establish thee unto the house as priest," 3. 6. 3. With a personal object it is sometimes impossible to distinguish locative and dative, because the forms are identical as in Greek. Thus Uśáne is both locative and dative of the proper name Uśánā, 6. 20. 11, uśáne kāvyā́ya (dat.); 1. 51. 11, uśáne kāvyé (loc.).

---

[1] Another meaning of sthā alone is "stand at" (with dative) "wait for," as in 10. 109. 3, ná dūtā́ya prahyè tastha eṣā́, "she did not stand (wait) to send (dat. inf.) a messenger;" 4. 54. 5, tasthuḥ savā́ya, "they wait for (stand unto) the command." Note that ánusthā with dative, "obey (thy law)," 3. 30. 4, later yields to acc. and loc. "follow, help," acc. 1. 134. 1.

[2] Cf. "stand" with a final dative, "thou standest to the protection of steeds," paripā́ṇāya tasthiṣe, AV. 4. 9. 2.

[3] The verb nídhar takes another sort of dative in 6. 67. 4, since it is here "bring down," "establish," "make," followed by object and predicate adjective with a dative, like that after any other verb of similar meaning ("great, strong, the pair to mortal foe she made," ripáve nídīdhas). Dhar itself takes a dative in the (middle) sense "be ready" as in AV. 6. 141. 1, póṣāya dhriyatām, "stay fast to prosperity" (i. e. be ready in order to prosperity); ŚB. 11. 4. 3. 7, dānāyā 'dhriyanta, "were ready to give."

3. The gerundives hávya and ī́ḍya with the dative.

The gerundive hávya is found with an instrumental of the person as agent, 1. 101. 6; 7. 22. 7; 7. 38. 1; 10. 38. 4; with instr. of means, dhībhis, etc., 6. 18. 6; 8. 96. 20 (hávyaṁ huvema); with pers. gen., 6. 21. 1 (imā́ u tvā . . kārór hávyam . . hávyā havante) and 6. 22. 1; with matīnā́m, 3. 5. 3 and 3. 49. 3; with the loc. 2. 23. 13; 5. 17. 4 (vikṣú prá śasyate); 5. 33. 5; 6. 45. 11; 6. 61. 12; 7. 30. 2; 7. 32. 24; 8. 20. 20; 8. 70. 8; 8. 71. 15 (víśvāsu vikṣv àvitéva hávyas); absolutely, 1. 116. 6; 1. 129. 6; 2. 37. 2; 2. 39. 1; 8. 1. 28; 8. 15. 16 (sá stómyaḥ sá hávyaḥ); 10. 6. 7; 10. 39. 1; 10. 89. 10; 10. 147. 2; in the following instances:

1. 100. 1, hávyo bhávesu . . no bhavatu . . ūtī́;
1. 144. 3, ā́d īm bhágo ná hávyaḥ sám asmád ā́;
4. 24. 2. sá hávyaḥ sá ī́ḍyaḥ . . yā́mann ā́ . . mártyāya . . várivo dhāt;
8. 90. 1, ā́ nas . . hávya índraḥ samátsu bhūṣatu;
8. 96. 21, sadyó jajñānó hávyo babhūva, kṛṇvánn ápāṅsi náryā purū́ṇi sómo ná pītó hávyaḥ sákhibhyas;
and in 10. 39. 10, carkṛ́tyaṁ dadhatur bhágaṁ ná nṛ́bhyo hávyam;
1. 33. 2, yá stotṛ́bhyo hávyo ásti yā́man.

The last example shows that the dative is not even certain in the three cases in which it appears to be an agent-case; like asmát, nṛ́bhyas may be ablative. But even granting that the other examples are really datives, the fact that a "dative of agent" with hávya occurs only once each in books one and ten, against the normal construction illustrated above, shows that an agent-dative is probably not an early construction. In 8. 96. 21, the examples already given of kar with dative show that sákhibhyas depends at least on the verb as much as on the gerundive (see below). In 3. 62. 1. yuvā́vate ná tújyā abhūvan, the dative depends on bhū, as it does in the other example cited by Delbrück, mánave śā́syo bhūs, 1. 189. 7 (cf . . purutrā́ hí vihávyo babhū́tha, 2. 18. 7).

But ī́ḍya with the dative demands more particular examination. A cognate gerundive is īḷénya, e. g., didṛkṣéṇyas . . jénya īḷényo mahó árbhāya jīváse, 1. 146. 5, "worshipful to the small." None of the gerundives here is construed with the

dative as agent, and so in other instances, both of this form and of īḍya, e. g., ágne mitró asi priyáḥ, sákhā sákhibhya, ī́ḍyas, 1. 75. 4, it is difficult to see why the dative should be necessarily taken as an agent, any more than when the locative is used in the same way, e. g., ádhā hí vikṣv ī́ḍyó 'si priyó no átithis, 6. 2. 7 (compare tvā vikṣv ī́ḍyam, 4. 7. 2; īḷényo vapuṣyò vibhā́vā priyó viśā́m átithis, 5. 1. 9). The adjective is as absolute as it is in 6. 1. 2, ádhā hótā ny àsīdo yájīyān . . ī́ḍyaḥ sán.

The fact is that sákhā sákhibhyas is a stereotyped phrase, which stands by itself, and the clause is not to be divided (as it is by Delbrück) sákhibhya ī́ḍyas. In 1. 26. 3, sákhā sákhye váreṇyas no one takes the dative as agent. Compare 9. 104. 5, sakhéva sákhye gātuvíttamo bhava (náryo rucé bhava, ib. 105. 5), where the dative is the same as in asmábhyaṁ gātuvíttamo devébhyo mádhumattamas, ib. 106. 6; but also 1. 53. 2, ákāmakarśanaḥ sákhá sákhibhyas, where the dative is not the object of the verbal, "not slighting desires, a friend to the friend." In other cases the dative is object not agent:

ā́ . . yajati . . śákhā sákhye váreṇyas, "friend gives to friend," 1. 26. 3.

sákhā sákhye apacat, "friend cooked for friend," 5. 29. 7.

sákheva sákhye . . prá ṇa āyur tārīs, "extend, as friend (extends) to friend, our life," 8. 48. 4.

pávasva jānáyann íṣo 'bhí víśvāni vā́ryā, śákhā sákhibhya ūtáye, 9. 66. 4.

A comparison of this example with the next shows that ī́ḍya is absolute in the latter as in the former:

pávasva viśvacarṣaṇe 'bhi viśvāni kā́vyā, sákhā sákhibhya ī́ḍyas, 9. 66. 1.

The meaning is not here, any more than in vs. 4, "to be revered by friends," but, as in vs. 4, "flow forth pure . . as friend to the friend, to help," "flow forth pure . . as friend to the friend, worthy of worship." And this should determine the meaning in 1. 75. 4 (where Delbrück translates "to be revered by friends") to be "thou art kind, dear, a friend to the friend, worthy of worship."

Other examples are: sákhā sákhibhyo (nas) várivaḥ kṛṇotu, 10. 42. 11, yán me bráhma cakrá . . máhyaṁ śakhye sákhāyas, "since to me the friend (as) friends ye made a hymn," 1. 165. 11.

This gives the norm for 8. 96. 21 (above),

kṛṇvánn ápāṅsi náryā purū́ṇi
sómo ná pītó hávyaḥ sákhibhyas,

"doing for his friends noble deeds he is to be invoked like Soma." Cf.

bhávā no agne sumánā úpetāu
sákheva sákhye pitáreva sādhús,

"good as parents do thou become well-minded to us on thy approach, as friend to friend," 3. 18. 1(*sc.* becomes well-minded).

ná sá sákhā yó ná dádāti sákhye,

"not he is friend who gives not to a friend," 10. 117. 4.

In almost every instance, therefore, the "friend to friend" clause is construed as explained above. So ī́dya like hávya can hardly stand as an early example of a gerundive with the dative of agent, since there is only one example in which the dative in the sákhā sákhye phrase does not depend on a verbal idea, and apart from this phrase ī́dya is always absolute, like most of the gerundives of its class. It occurs in phrases, adhvarésv ī́dyas, 3. 29. 7; 4. 7. 1; 5. 22. 1; 6. 49. 2 (viśo-viṣa ī́dyam adhvarésu), and vajñésv ī́dyas, 8. 11. 1; 10. 30. 8. The only cases where the dative is certain, against three with nas (1. 12. 3; 188. 3; 10. 100. 9); two (1. 1. 2; 3. 29. 2), with the instrumental (agent); and thirty absolute cases, are the two from books one and nine; although even they are more probably absolute than real examples of the dative of the agent. The dative of the agent arises from a wrong way of looking at the adjective (gerundive). It is not a syntactical phenomenon of the later period. It is supposed to arise and die out in the early poems, sporadically taking the place of the normal instrumental or genitive (with adjective).[1]

[1] A companion-piece to the phrase "friend to friend" is "father to son." A study of the occurrences shows that the dative is more or less stereotyped but like loc. and genit. depends for its character partly on real relationship with adjacent words. Thus just as we have jáne śévas, 1. 9. 4; śévam mitrā́ya, 10. 113. 5; aruṣásya śévam, 3. 7. 5; so we have pitéva soma sūnáve suśévaḥ (sákhava sákhye), 8. 48. 4, "as father to son is kind." Other examples are 1. 1. 9, sá naḥ pitéva sūnáve 'gne sūpāyanó bhava, "as father to son (is) easy of access," in which the dat. depends on the verbal notion. (Compare AV. 12. 3. 12, pitéva putrā́n abhí sáṁ svajasva nas, "embrace us as a father his sons"; ib. 5. 14. 10,

This does not assume that the adnominal dative (which like the final is also Avestan) is not primitive. It is often identical with the final. Cf. paridhír jívanāya kám, "a defence unto living," AV. 8. 2. 25. It occurs either with ásti or bhū. Compare both in 6. 45. 26, gāúr asi vīra gavyaté, áśvo aśvāyaté bhava, "thou art a cow to one seeking cows; become a horse to one seeking horses." But the stereotyped phrase (cf. Av. cīm hakha haše baraiti) is not a good illustration of the construction with ídya..

4. The syntactical construction of verbs of speaking in RV. and AV.

In Vedic-Sanskrit we have a perfectly normal development from the use of the dative with verbs of speaking as found in Greek, Latin, German, and Avestan. The accusative personal object is not primitive, except where speak is "call" or "name"; the dative of the object is primitive. The accusative after "call," the dative after "speak" (to), as in Avestan, is the starting point. But the (Latin) construction of accusative and infinitive with a verb of saying is primitive and may be filled out with a dative of the person addressed. Compare in Avestan, "I say to thee (dative) [that] the holy one (acc.) [is] to love (= to be loved; the infinitive as passive, āfryēidyāi) by (literally, "on the part of," abl.) the holy." Compare Hübschmann's *Casuslehre*, pp. 179, 217. The regular construction in Avestan is the dative of the person after a verb of speaking; the accusative is not an exception to this, since it occurs only when the verb means "call," "name," "declare," usually as a double accusative. The standing phrase "Ormuzd spoke to Zoroaster" (dative) shows the normal usage; the verb meaning speak (to) takes a dative just as verbs of screaming, lamenting, praising, greeting, regularly take the dative.

It is from this point of view that we should start. We shall find that in Vedic-Sanskrit the dative yields slowly to the accu-

---

putrá iva pitáraṁ gaccha, "go as son to father.") In 10. 25. 3, pitéva sūnáve mṛdā́ no abhí cid vadhā́t, "be merciful to us as father to son," the last word is governed by the corresponding form of the verb, which governs the dative of the person (accus. of the thing) in the sense "excuse this unto," and is here united with abhí, just as abhí-kṣam, a verb of similar sense, takes the dative, nas . . abhí kṣamadhvaṁ yújyāya, 2. 28. 3 (29. 2), or locative, abhí no vīró árvati kṣameta, 2. 23. 1, or accus., abhí nú mā́ cakṣamīthāḥ, 2. 33. 7.

sative (later the normal Sk. case) as the general case of the person addressed.

(a): The simplest construction with a verb of speaking is verb and direct object, either as a clause embodying what is said or as an accusative. In the first instance nothing indicates a quotation; or an íti "so" shows that the words are cited: śáśvatī nárī . . āha bhójanam bibharṣi, "every woman says (proclaims) you bring enjoyment," 8. 1. 34 (no íti); né'ndro astī 'ti néma u tva āha, "Indra is not, so many a one proclaims," 8. 100. 3. The íti citation may be put into one clause and completed outside of it, yá índrāya sunávāmé 'ty ā́ha náre, etc., 4. 25. 4 = 5. 37. 1 (without náre). Compare, ná vocāma mā́ sunoté 'ti sómam, "we will not say 'do not press soma'," 2. 30. 7. The acc. is here impersonal: kád yád ūcimá, "what (is it) which we proclaimed?" 1. 161. 1; satyám ūcus, "they proclaimed sooth," 4. 33. 6; yát kíṁ ca . . idáṁ, vádāmi, "whatsoever I proclaim here," 6. 47. 10; vā́cam[1] . . citrā́ṁ vadati, "he proclaims (clamat) a clear word," 5. 63. 6; yád ábravam prathamám, "what first I said," 1. 108. 6; satyám bravīmi, "I speak sooth," 10. 117. 6; ṛtám ít tá āhus, "they speak right," 3. 4. 7.

This is a common construction with vac, vad, and brū; but the example of ah is unique in the Rig Veda (in not having a complementary personal dative). In AV., however, ah as "say" (= brū or vac, with acc. alone) is not uncommon; cf. tád . . táthā 'ha, AV. 3. 4. 5; bahv ìdám . . ánṛtam āha pū́ruṣas, "much untruth here a man says," AV. 11. 44. 8; tád agnír āha, "Agni says this," AV. 8. 5. 5 = 19. 24. 8.

(b): An acc. of the person addressed stands after the verb of speaking. Here also a distinction must be made; vad in RV. takes no such acc. Although ah occurs many times with a predicate accusative it takes the acc. of address (= "speak to him," etc.) late and rarely (three or four times only); vac takes this accus. only in a couple of late passages; brū has the accusative of address only once outside the first and tenth books of RV. Discussion follows.

ah: The prevalent meaning is not "address" ("speak to") but "declare," "call," with accusatives as direct object and

[1] The cognate acc. with vad is (not vādam but) vā́cam or °vākám (e. g. 6. 59. 4, joṣavākáṁ vádatas).

predicate. Just as one may say "they say this (is) true" so one may say "they say him seer" (i. e. declare him to be a seer), RV. 10. 107. 6, that is, the construction is identical with that of the impersonal object. This often has the appearance of "address," thus: evā́ tám āhur utá śṛṇve índra éko vibhaktā́ . . (no íti), "thus they say (declare) him (and Indra is famed as only distributor)" etc., 7. 26. 4, where "address him thus" is inappropriate, as in many other examples freely so rendered. The following examples illustrate the faintness of the line dividing "call" and "say" (with predicate, as meaning of ah): utá tvaṁ sakhyé sthirápītam āhus, "and many an one in friendship firm they say," i. e. "they say is firm" or "they declare many an one firm," 10. 71. 5. So 10. 112. 9, "they declare you most priestly" (or "say you are"); "whom do they declare hero" (or "say is hero"), etc., 10. 114. 9.

One acc. may be omitted; pāpám āhur yás, etc., "evil they declare (him) who," etc., 10. 10. 12; or the predicate may be expressed by a direct quotation: yá īm āhúḥ surabhír nír haré 'ti, "who declare it (is) 'fragrant, take it out'," 1. 162. 12.[1]

As tám evá ṛṣím . . āhus, 10. 107. 6; yuvā́m íd āhur bhiṣájā, 10. 39. 3, mean "they call (declare) him a seer," "they call you physicians," and as in the example just given, an íti clause may be substituted, so yó mā móghaṁ yātudhāné 'ty áha, 7. 104. 16, does not mean "who addresses me" but "who calls (proclaims) me a wizard" (or "says I am a wizard") and neither "address" nor "say about" is the true rendering. So in 10. 34. 4, enam āhur ná jānīmo náyatā baddhám etám, the construction is the same as in 9. 114. 1, tám āhuḥ suprajā́ íti, "they proclaim him with the words (i. e. say he is) 'possessed of children'," and the clause should be rendered "they say (proclaim him with the words) we do not know him." Similar is uté 'm āhur nāí 'ṣó astī́ 'ty enam, "and proclaim he is not," 2. 12. 5; utāí 'nam āhus . . asarat, 4. 38. 9 (no íti). A general

[1] An apparent third accusative is syntactically an adverb, kím, in kím aṅgá=nonne: kím aṅgá tvā maghavan bhojám āhus, "do not they declare you generous," 10. 42. 3 (with the same construction following with śru "hear"); kím aṅgá radhracódanam tvā 'hus, "don't they declare you the helper of the wretched," 6. 44. 10; kím aṅgá tvā'hur abhiśastipā́m nas, "don't they declare you our protector from curses," 6. 52. 3 (on nas, see under c. below).

predicate may be added: satyám íd vā́ u aśvinā yuvā́m āhur mayobhúvā, "and sooth they proclaim you are joyous," 5. 73. 9, but this is adverbial.

The accusative of address is more nearly approximated in a few instances: rā́jā cid yám bhágam bhakṣí 'ty āha, "whom even a king calls (addresses) with the words 'give a share'," 7. 41. 2; tám ayáṁ sóma āha távā 'hám asmi, "him Soma calls (proclaims, addresses) with the words 'I am thine'," 5. 44. 14–15; íti tvā devā́ imá āhur āiḍa, "so the gods call (address?) thee, Purūravas," 10. 95. 18; yán mā sāvó mánuṣa ā́ha, "when Soma calls me" (?, followed by nirṇíja ṛ́dhak kṛṣe dā́saṁ kṛtvyaṁ háthāis). Of these passages, those in 5. 44 and 10. 95 are referred by Arnold to C² and C¹ respectively and that of 7. 41 to B², only the last (doubtful) example being even as early as B¹. In other words, the accusative of address, with ah, if it be admitted at all, belongs not to the earlier but to the later part of RV.

vac: That ah has the meanings "say" and "call" is paralleled by the use of vac "speak" (voco, "call") in áchā devā́n ūciṣe, "you called gods hither," 3. 22. 3 (Ludwig, "hast her angesagt die götter"). Thence by way of the meaning "invoke," vac passes into the (later customary) construction of accusative of person addressed. The process may be illustrated by: "*Mighty*, with this word the voice of the singer praises thee . . we will laud thee . . so they have called (addressed?) thee," íti tvā . . avocan, 10. 115. 9. With this may be compared another late verse, 5. 2. 12, where ítī 'mám agním amṛtā avocan ("so they called this Agni") follows and precedes a laudatory injunction. It is surely not necessary here to render avocan as "spoke to," though the meaning hovers near it, as it does in 7. 28. 5, vocémé 'd índram maghávānam enam . . yád dádan nas, "let us call Indra, the generous one, that he may give to us." Compare 1. 150. 1, purú tvā dāśvā́n voce, "I giving (much) call thee much," where the impersonal accusative is probably an adverb. In AV. 10. 1. 7, yás tvō 'vā́ca parehí 'ti, "who calls (or speaks to) you with the words 'get out'," the later sense is fairly reached. As "call" may be equivalent to "name," the sense of RV. 10. 120. 9 = AV. 5. 2. 9. ávocat svā́m tanvàm índram evá, may be either "called Indra as himself" (Ludwig) or "spoke of himself as Indra" (Whitney).

brū: Instances of accusative of address with brū are rare and found chiefly in the later books; nā́satyāv abruvan devā́s, "gods addressed Aśvins," 10. 24. 5, kád u bravas . . vī́cyā nṛ́n, 10. 10. 6 (doubtful). The acc. after a combination of word of speaking and transitive verb, 8. 48. 1, víśve yā́ṁ devā́ utá mártyāso mádhu bruvánto abhí saṁcáranti, does not belong here, the meaning being "to which gods and men calling it mead come together" (cf. áthā 'bravīd vṛtrám índro hanisyán, "then Indra spoke about to kill Vṛtra," 4. 18. 11). Another passage in the eighth book, 8. 92. 2, has puruhūtám . . . sánaśrutam índra íti bravītana; but here the row of accus. in the first half verse is a continuation of that in the preceding, which is governed by abhí prá gāyata, "(sing forth unto Indra the powerful) the much-invoked, him famed of old; call with the word Indra." In 8. 45. 37, kó nú . . sákhā sákhāyam abravīt has the speech following and may mean "addressed," but brū here is on the border-line between "speak to" and "invoke" and answers to the latter meaning in ádhā cid va utá bruve, 8. 83. 9, either "I call (= name) you so" (cf. ā́d u bruvāte mithunā́ni nā́ma, "name themselves") or "invoke," like úpa bruve in 8. 67. 10, utá tvā́m . . úpa bruve, "I invoke you," ("invoke one to," dat., 3. 37. 5), and so in 6. 56. 4, yád adyá tvā . . brávāma . . tát sú no mánma sādhaya, "what we invoke thee (for), that prayer accomplish thou" (cf. 1. 185. 11, yád ihó 'pabruvé vām, and AV. 5. 22. 11, tát tvā . . úpa bruve). Similar is agním brūmas, followed by a petition ("release us from anguish") in AV. 11. 6. 1 ff.

Altogether in the Rig Veda instances of acc. after "address" are few and doubtful; some are distinctly late. Of the few, several have the meaning "call" rather than "speak to." The combination of (a) and (b), that is "say something to someone" (both acc.), is a familiar type in Greek and in later Sk. (cf. yan māṁ vadasi, Gītā, 10. 14; yac ca mām āha, Mbh. 3. 92. 16, etc.); but in the Vedic language it is still a conspicuous solecism. One doubtful case may be found above in a late hymn—kád u bravas . . nṛ́n, 10. 10. 6. There is no such construction with vad till Ait. Br. 3. 20, and that is unique, besides being, like the case above, a combination (ity evāi 'nam etāṁ vācaṁ vadanta upātiṣṭhanta) of a verb of speaking with a verb of approach, so that the accus. of the person depends rather

on upātiṣṭhanta, than, as Liebich explains the passage (BB. 2. 275), on vadantas. There is a similar case in AV. 15. 11. 2. Here the later construction of acc. of address is gaining ground as compared with RV. and íty enam āha, "thus addresses him," is found in 11. 3. 28 ff., as in 15. 11. 3, yád enam ā́ha, "when he addresses him" (the only cases in AV.); but in the latter passage the preceding verse has svayám enam abhyudétya brūyāt, where the accusative is introduced by the verb of motion and probably depends upon it quite as much as on the verb of speaking; although brū shows in AV. a marked advance on RV. and takes the acc. of address: bhū́mim abravīt, "said to earth," 13. 1. 54; tā́ṁ devā́ abruvan, "said gods to him," 15. 3. 1; mā́m abravīt, "said to me," 6. 82. 2, quite as in the Brāhmaṇas.

The double construction with vac may occur in RV. 10. 80. 7, agním mahā́m avocāma suvṛktím, and as such is registered in the *Grundriss*, iii, p. 382; but it is quite doubtful, as will be seen by comparison with 2. 4. 1, huvé suvṛktím . . agním ; 3. 2. 3, mahā́m (agním), that is, mahā́m and suvṛktím may be adjectives with agním. For tád vananti mā in AV. 12. 1. 58 there is an improbable v.l. vadanti. Sāyaṇa at 8. 77. 2 renders ā́d īm śavasy àbravīd āurṇavābhám ahīśúvam by "she addressed him (with the answer) 'Aurṇabhāva and Ahīśuva'" ("these two demons and their like you must overcome"), but īm as etam Indram (abravīt) is improbable (see note on this, p. 381).

(c): The accusative after a verb of speaking is often a predicate. The examples are too numerous to cite in detail (several have been given above), but typical are "what they (say, āhús) call fights that (is) illusion," 10. 54. 2; "they proclaim the sweet fruit on its top," ágre, i. e. say it is on its top, 1. 164. 22; "they proclaim (say there are) three connections of you in the sky"; 1. 163. 3; "don't they proclaim you the best comers" (kím aṇgá vām . . gáṁiṣṭhā 'hús, 1. 118. 3 = 3. 58. 3); "how do they proclaim (call) him generous to the singer" (kathāí 'nam āhuḥ pápuriṁ jaritré), 4. 23. 3. All these (with ah) have predicate alone (jaritré depends probably on pápurim); but one example of it has a personal dative in addition to the predicate, tā́ṅ u me puṅsá āhus, "they say to me these (are) males," 1. 164. 16 (ib. 15, 19, 46, without me). This combination might indeed be suspected in the example given above (p. 376) kím aṇgá tvā

'hur abhiśastipā́m nas, 6. 52. 3; but it is improbable, as it is improbable in tvā́m ín me gópatiṁ víśva āha, "everyone calls you my protector" (not "says to me"), 7. 18. 4, which is comparable rather with the genitive construction, tvā́m íd āhuḥ prámatiṁ vaso máma, "they call you my guardian," 8. 19. 29. It occurs, however, once more in AV. 2. 2. 3, samudrá āsāṁ sádanam me āhus.[1]

The origin of the predicate construction is that of apposition, agníṁ yamám mātaríśvānam āhus, "they proclaim (it as) Agni, Yama," etc., after ékaṁ sád víprā bahudhā́ vadanti, "they declare manifoldly (adv. as pred.) that which is one"; 1. 164. 46, and as such the predicate is indifferently adjective or noun "people proclaim (call) him (tám . . jánā āhus) one well-endowed-with-straw," 1. 74 5; "soma-lover they call thee," 1. 104. 9. From this to the predicate is but a step, "thence born they proclaim seer Vas." (they say seer Vas. was born thence), táto jātám ṛ́ṣim āhur Vásiṣṭham, 7. 33. 13 (just like "they proclaim him seer.")

The predicate with vac also (as with ah) may take a supplementary dative. Thus, not only yásya víśvāni hástayor ūcúr vásūni ní dvitā́, "in whose hands they proclaim all good things surely," 6. 45. 8; but also devó nas . . ánāgaso vocati sū́ryāya, "the god shall proclaim us sinless to the sun," 1. 123. 3 (as with prá, prá yé me pitáram . . rudráṁ vocanta, "proclaimed to me Rudra as father," 5. 52. 16)[2]; perhaps also in 8. 59. 5, ávocāma satyáṁ tveṣā́bhyām mahimā́nam indriyám, "we proclaimed as true (?) to the two mighty ones Indric greatness"; cf. ṛtáṁ divé tád avocam pṛthivyā́ abhiśrāvā́ya prathamáṁ sumedhā́s, "as right this I declared to heaven and earth to hear first," 1. 185. 10.

With vad the predicate is expressed by an íti in AV. 11. 1. 7, svargó loká íti yáṁ vádanti, "which they declare as (say is) heaven" (in AV. 6. 61. 2-3, aháṁ satyám ánṛtaṁ yád vádāmi, is "what false I say is true").

---

[1] Other pred. constructions in AV. are like those in RV.: "they proclaim thee (to be) seed of the sea," 9. 1. 2; "whom they proclaim as a star," yā́m āhús tārakā . . íti, 5. 17. 4 (and so 11. 6. 7).

[2] With právac also dative but with direct quotation (of what is proclaimed) following, prá nú vocaṁ cikitúṣe jánāya mā́ gā́m . . vadhiṣṭa, "I proclaim to the thoughtful man 'do not kill a cow,'" 8. 101. 15.

With brū the predicate occurs in 1. 161. 13, "the goat declared the dog an awakener," śvānam bastó bodhayitāram abravīt.[1] The statement in 1. 23. 20 = 10. 9. 6, apsú me sómo abravīd antár víśvāni bheṣajā́, "Soma told me all medicines (are) in water," shows again the personal dative after the accusative used as predicate (followed by agníṁ ca viśvásambhuvam, "and Agni (is) healing to all").

(d): When a thing is said to a person the person stands in the dative, pitré . . ucyate vácas, "to the father is said the word," 1. 114. 6. The meaning "declare" appears in yó . . svápne bhayám bhīráve máhyam āha, "if (a friend) has declared (spoken a word of) fear[2] to me the fearful," 2. 28. 10; díśa āhā viprechaté, "he declared to (me) asking the directions," 9. 70. 9; and this may be rendered by "say," as with the impersonal object. Examples are numerous: ayám me . . tád āha, "this one has declared (or said) it to me," 10. 27. 18; tád . . máhyam āhus, "they said it to me," 1. 24. 12; samānám ín me kaváyaś cid āhur, "the same thing said even the seers to me" (the words said follow without íti), 7. 86. 3. With prá-ah the construction is the same, 4. 19. 10 (ádhi-ah is "bless," RV. 10. 173. 3; AV. 1. 16. 2, with dat.), prá te pūrvāṇi káraṇāni . . āha vidúṣe, though Delbrück, SF. 5. 141, appears to recognize this construction only for the prose literature ("in P ist der Dativ bei prá-ah belegt.")[3] So with prá-vac, "proclaim" (="teach"), ágni máhyam pré 'd u vocan manīṣā́m, "Agni proclaimed to me (taught me) wisdom," 4. 5. 3; also in a meaning

---

[1] With 8. 77. 2, ā́d īm śavasy àbravīd āurṇavābhám (after the question, "who are strong and famous?") "then truly she proclaimed Āurṇavābha," compare the parallel, 8. 45. 5, práti tvā . . vadat (words quoted, no íti); but it is wrong to assume for 77. 2 "addressed him," or a predicate, still less a double acc. pers. thing. As in 1. 144. 3, ā́d im bhágo ná hávyas, īm is a mere particle and the words are to be translated as above.

[2] Cf. the epic abhayā vāk, "fearless word," i. e. word of encouragement.

[3] The combination práti-ah takes acc. of person in RV. 8. 96. 19, prátī'd anyám āhus, "said (what precedes) to each other" (as in Up.); of thing in AV. 18. 2. 37, práty etád āha, "said this"; prátibrū "respond" (to, dat.), 4. 3. 8 (with acc. 1. 161. 3). The dative occurs after prátivac in RV. 8. 100. 5, mánaś cin me hṛdá ā́ práty avocat, "my mind said to my heart" (cf. tád ayáṁ kéto hṛdá ā́ ví caṣṭe, 1. 24. 12).

equivalent to "betray" and "appoint," 7. 1. 22 and 8. 27. 10 (*scil.* us to ill and good, respectively). So, too, prá-brū in AV. is declare = betray, i. e. "tell on," AV. 5. 22. 8, etc.; but in RV. prá-brū is "proclaim" (to, dat.), 4. 42. 7; and "bless" or "praise" ("speak for"), 1. 161. 12, yáḥ prábravīt pró tásmā abravītana. On právac with loc., see below.

Outside of compounds, vac itself is construed regularly with an acc. and dat., "we called (said) obeisance," ávocāma námas 5. 73. 10, "we (called) said a word to Agni," ávocāma . . agnáye vácas, 1. 78. 5; "we said a word to the seer," ávocāma kaváye vácas, 5. 1. 12; and so yád vām . . ucátham ávocan, 1. 182. 8; kád rudrā́ya vocéma, 1. 43. 1. The acc. is etymological (cognate, vac vácas) or not, etā́ te agna ucáthāni . . ávocāma, 4. 2. 20; mántraṁ vocemā 'gnáye/ ārē asmé ca śṛṇvaté, "let us call (say) a prayer to Agni who listens to us even afar," 1. 74. 1; imā́ṁ sv àsmāi hṛdá ā́ sútaṣṭam mántraṁ vocema, 2. 35. 2; tád divé . . vocam, 1. 129. 3; námo divé vocam, 1. 136. 6; ávocāma námo asmāi, 1. 114. 11; suṣṭutím . . vocéyam asmāi . . śṛṇótu nas, 10. 91. 13; vocés (declare) tán nas . . yát te asmé, 1. 165. 3.

Instead of a dative stands a personal locative, túbhyam . . nivácanā . . áśaṅsiṣam, 4. 3. 16; ávocāma nivácanāny asmin, 1. 189. 8; prá rāmé vocam (sc. tát), 10. 93. 14. Doubtful is the locative in 5. 61. 18 (íti preceding), utá me vocatād íti sutásome ráthavītāu ná kā́mo ápa veti me. The impersonal locative gives the subject of the conversation, generally a dispute (as later with saṁvad, vivad) ví . . apsú . . ávocanta, "disputed about water," 6. 31. 1; tvā́ṁ hy àṅgá varuṇa brávīṣi púnarmaghesv avadyā́ni bhū́ri, "speakest many reproaches about Indian givers," AV. 5. 11. 7.[3] Compare the use of the locative with upālabh in Ch. Up. 2. 22. 3, taṁ yadi svareṣū 'pālabheta, "if one

[3] The construction of vac in AV. is as in RV. without object or with object, "declare birth of gods," AV. 2. 28. 2; 4. 1. 3; with acc. and loc. where (pred.) ib. 13. 1. 14; "what you say untrue," ib. 1. 10. 3; "speak truth," ib. 4. 9. 7; obj. with íti, váruṇé 'te yád ūcimá, "if we said 'O Varuṇa,'" ib. 7. 83. 2; so 5. 17. 3; predicate, mā́ mā vocann arādhasam, "declare me ungenerous," ib. 5. 11. 8 (18. 1. 36 = RV.); with dative, asmāi vápūṇṣy avocāma, ib. 5. 1. 9. In composition, právac, AV. 7. 2. 1; 2. 1. 2 (=RV. acc. dat.): ádhivac (as in RV.) is "advocate," "speak for us," AV. 6. 7. 2; no dat. with úpavac, 5. 8. 6, nírvac, 9. 8. 10 (abl.).

should take him up in regard to his vowels" (reproach him for his execrable pronunciation).

With vad, which as yet has no pers. acc., "speak to" may be expressed by dative (with acc.) or by ácha with acc.; the latter is 8. 21. 6; 10. 141. 1; with práti, ā́ (abhí- vad does not occur in RV., but in AV. 9. 6. 4, as "greet"; in the epic, vada mām and vada mām abhi are equivalents and equal to Vedic práti vad; with sam, the instr. "self"). "Speak about" (later Sk. acc.) is expressed by loc. (see the last paragraph), 10. 109. 1 and 4, tè 'vadan prathamā́ brahmakilbiṣé . . devā́ etásyām avadanta pū́rve (AV. 5. 17. 1). The dative, always with accusative, has the force of práti in práti tvā . . vadat, "said to thee," 8. 45. 5 (with address following). Thus, śraddhiváṁ te vadāmi, "I say a plausible thing to you," 10. 125. 4; nó 'paspíjaṁ vaḥ pitaro vadāmi, "I say no jest to you," 10. 88. 18; grā́vabhyo vā́caṁ vadatā, "say a word to the stones," 10. 94. 1; ósṭhāv iva mádhv āsné vádantā, "like lips speaking honey to the mouth," 2. 39. 6. The compounds do not add much to the sense, nas . . bhadrám āvada, "hither-speak good to us," 2. 43. 2; adhaspadā́n me úd vadata, 10. 166. 5 (?). To these datives AV. vad adds "speak discord to the foe," 5. 21. 3; "let the wife speak a sweet word to the husband," 3. 30. 2; "one to the other speaking what is agreeable," anyó anyásmāi valgú vádantas, 3. 30. 5[1] (besides the same without dat., "I speak a sweet word" and "speak discord," with "foe" in loc. instead of dat.). In AV. právad takes acc. dat., 4. 24. 3, yásmāi grā́vāṇaḥ pravádanti nṛmṇám (RV. 10. 94. 1 comes near to this). The dative after vad is also used in AV. as a final, "speak unto not-giving," ádānāya (so with úd-vad, AV. 5. 20. 11).

The common construction with brū is acc. dat., tád vo devā́ abruvan, "the gods said this to you," 1. 161. 2; ā́d vām bravāma satyā́ny ukthā́, 6. 67. 10; índrāya nūnám arcata/ukthā́ni ca bravītana 1. 84. 5; námas te bravāma, 2. 28. 8; brávāṇi te gíras, 6. 16. 16; brávīmi te vácas, 1. 84. 19; káḥ svit tád adyá no brūyāt, 10. 135. 5 (the doubtful forms belong here as datives). So in AV., ṛtúṁ no brūta, 8. 9. 17; gharmáṁ no brūta, 4. 11. 5 (prá, 5. 11. 6). The compound ví-brū, "teach," is used in

[1] In RV. 10. 62. 4, vadati valgú vo gṛhé, the vas probably goes with gṛhé.

the same way, vy àbravīd vayúnā mártyebhyas, "taught to mortals wonderful things," 1. 145. 5, as in prá-brū, "proclaim," 1. 161. 12, etc.

(e): The personal dative without accusative does not differ from that with the accusative. Thus as we have "he declared (āhus) to me asking the directions" (above, p. 381), so we have "they declared (said) to me," té ma āhus, with the words said following (without íti), 5. 30. 2 and 5. 53. 3. As we have "declare that to us," vocés tán nas (above, p. 382) so we have uvā́ca me várunas, "Varuna declared to me," with words following (without íti), 7. 87. 4. As we have "who will say that to us," tádno brūyāt (above, p. 383), so we have śṛṇvaté te bravīmi, "I say to you," 10. 18. 1, what is said following (without íti). There is no essential difference between the verb with and without a direct object. So "how" and "what" (i. e. without or with an obj. acc.) occur indifferently with brū: kathā́ mahé rudríyāya bravāma, kád rāyé cikitúṣe bhágāya, "how shall I speak to . . what shall I say to," 5. 41. 11; kathā́ mitrā́ya . . . brávaḥ kád aryamné, 4. 3. 5; yád . . brávas . . mitrā́ya . . satyám, 7. 60. 1. Again in 1. 139. 7, devébhyo bravasi is "thou shalt say to the gods," with what is said following (without íti). In 9. 82. 4, śṛṇuhí brávīmi te, nothing particular is "told;" translate, "listen, I speak to thee." So brávad yáthā . . sudā́se, "that he say to Sudās" (with speech following), 7. 64. 3; yáś cikéta sá bravītu nas "who comprehends shall say to us," 5. 65. 1 (that is, say "whose songs the god accepts," as follows) are parallel to the later regular acc. with the words of the remark following, tam uvāca . . iti. Of course brū also has the meaning of prábrū, as in 5. 12. 5, ṛjūyaté vṛjināni bruvántas, "proclaiming evil to the pious." In AV. cf. 5. 11. 1, kathám mahé ásurāyā 'bravīr iha, "how did you speak to the great spirit" (ib. 6, prá and tát), still keeps the dative of address which may be called the earlier Vedic type, as opposed to the acc. person (with or without acc. of thing said), which is typical of the later style. Thus verbs of speaking agree fully with verbs of motion in taking dative first and accusative later when meaning "speak to," "go to (ward)."

The force of the dative, moreover, may be measured by its interchange with práti and acc., just as with other verbs (as illus-

trated in my former paper). Thus práti tvā śavasī vadat, "said the mighty one unto thee," 8. 45. 5 (followed by the speech without íti); áthā śíraḥ práti vām . . vadat, "said (spoke) the head unto you," 1. 119. 9; as in 1. 161. 2, tád vo devā́ abruvan, "said the gods to you."

As between accusative and dative used after verbs of speaking there is then, to sum up, a much greater variety in RV. than is found in the Brāhmaṇas. "Speak to" is expressed by the acc. rarely and in late passages; "say this to one" by double accusatives only as an exception. The usual construction is acc. of thing and dative of person or dative of person alone, with the words said given directly (with or without íti). This agrees with the radical meaning of the words; vad is "sound" (clamo, clamor), and so is used regularly of musical instruments (cf. bhan "sound," bhaṇ, "speak"), the latest verb to take the acc. of person; vac is "call, name," connected with vox, voco; brū (mrū), murmur (cf. rap, lap, "whisper," "talk," loquor), "sound," "speak" to, with dative; ah is "declaro" (áhan, the "clear," day; áha, "clearly"), just as ā́caks, "explain" (make visible) becomes "say" with dat., and at last takes acc. of address (cf. dico, "point out," indicate; diś "point, show," like a verb of speaking in RV. 10. 92. 9, stómam vo adyá rudrā́ya . . námasā didiṣṭana, "with obeisance show [declare] your praise to Rudra"; and ādiṣṭam bhavati, "is pointed out," "taught," Ch. Up. 3. 18. 1). So bhā, "appear," is connected with bhāṣ, "speak," first in Brāh.

That a word used of any sort of noise should be used also of speech is not unparalleled (ŚB. 10. 6. 5. 4). Thus in 10. 33. 1, duḥśā́sur ā́gād íti ghóṣa āsīt, "'the evil one has come,' so was the sound" (=report). Cf. bhan (later with prati) in 4. 18. 6, 7. AV. appears to have śaṅs in the epic sense of "tell" (śaṅsa me, "tell me," Śk.) in 6. 45. 1, kím áśastāni śaṅsasi, "why do you tell untold things?"[1] Sk. śabditam is "named."

(f): A few cases remain where (speak) "about" has been given as the meaning with acc. In AV. 12. 4. 22 and 42, tām abravīt is thus rendered. But here, as elsewhere, "about" is only idiomatic English for the original "declared or proclaimed

[1] Perhaps only "recite." Cf. RV. 4. 3. 3. devā́ya śastím . . śaṅsa (4. 16. 2, śáṅsāty ukthám); Tāitt. Up. 1. 8. 1. om śom iti śastrāṇi śaṅsanti.

her," the explanatory words following; without íti in 22, but in 42, tấm abravīn nāradá eṣấ vaśấnām vaśátamé 'ti, "Nārada proclaimed her with the words 'she is of cows the cowest.'" So in AV. 8. 10. 9, tấṁ devamanuṣyā̀ abruvann iyáṁ evá tád veda yád ubháya upajívema . . íti, "gods and men proclaimed her with the words 'she alone knows,'" etc. The only case where the object is not a whole person to be exploited by a phrase is AV. 9. 4. 12, aṣṭhīvántāv abravīn mitró mámāi 'tāú kévalāv íti, "Mitra proclaimed his knees with the words 'these (are) wholly mine.'" Of course these are the same as in RV. 4. 38. 9, utāí 'nam āhuḥ samithé viyántaḥ párā dadhikrā́ asarat sahásrāis, "they proclaim him (with the words) 'he has won.'" In AV. 18. 4. 49, yád vām abhibhā́ átro 'cús, "what the portents (?) declared you (are)," instead of "said about you" is at least probable. Cf. "spoken the Jew" (=described), *Ivanhoe*, ch. 39.

The same thing holds in regard to the Brahmanic acc. "about," as in ŚB. 10. 3. 5. 15, ya enam nirbruvantam brūyād aniruktāṁ devatāṁ niravocat . . iti, "if one should proclaim him speaking distinctly with the words," etc.; 8. 1. 3. 5; ib. 6. 1. 16, tam āha (brūyāt).

The effect of a "Greek accusative" is produced by this "about" rendering after verbs of speaking. Thus tad āhus, "as to this, they say" (literally "they say this" or as adv, "so they say"). But in the Brāhmaṇas this becomes stereotyped and we have (as in the Upaniṣads) tad eṣa śloko bhavati, "as to this (so) there is a verse," ŚB. 10. 5. 4. 16, etc. So without any verb, tad eṣa ślokas, Ch. 3. 11. 1, etc.; cf. yathāi 'vāi 'tad, "as to this," AB. 7. 25; even, Māit. Up. 6. 10, athendriyārthān pañca svāduni bhavanti, "the five (organs of sense) arise *as to the objects of sense* (acc.) in experiencing sweetness," unless bhū here (as in the epic) governs the acc., "come to."

Contrasting sharply with the variety of the Rig Veda but, as shown above, continuing the later lines of the Atharva, the Brāhmaṇas present the uniform type (taṁ ho 'vāca; tān ho 'vāca, ŚB. 10. 5. 5. 1; 6. 1. 10, taṁ no brūhi, ŚB. 10. 6. 1. 3; Āit.Br. 7. 28; agnim abravīt, ŚB. 9. 2. 3. 49), which has given Delbrück the basis of his too sweeping rule to the effect that the regular Vedic construction is acc. of the person addressed (dative only

with acc.; "tell someone something," etc. SF. 5. 141). This is Brahmanic. So in ŚB. 10. 3. 4. 3, atha vāi no bhavān vakṣyati, "you will tell us" (*sc.* it); 10. 4. 3. 7, tebhyo vāi nas tvam eva tad brūhi yathā, "do thou declare this to us, such as we are, how," etc. Usually (vac or) brū is the word for "address," not ah, though the latter occurs, āha vāyum, "spoke to wind," ŚB. 10. 3. 5. 14. In ŚB. books 8 and 9, āha (āhus) are used only in the sense proclaimed ("spoke about"), but abravīt (abruvan) fourteen times as "address" (only once as "about"); uvāca only once as "addressed," 9. 5. 1. 64 (yet four times in the book 10); ācakṣ (tan me), 11. 6. 1. 2 occurs first in Br. (then used later, as in Ch. 2. 1. 1). Here prátiśru, "answer," takes either acc., 11. 4. 1. 3 (cf. Ch. 4. 5. 1), or dat., 1. 4. 1. 10. RV. has mantray; āmantray, "speak to," ŚB. 11. 8. 4. 1, takes acc. as in Up. (below). The Br. shows also a new use of adhī, "teach" (instead of "learn"), "declare," adhīhi bhos tam agnim, "teach that Agni, boss," 10. 3. 3. 5 (cf. Ch. 7. 1. 1).[1] In pratijñā (AV. 19. 4. 4, with vā́cam, "approve the word"), med. as "answer," there is also a new use, ŚB. 2. 5. 2. 20; Ch. 4. 1. 8 (later act. as "assert"). This field has been so thoroughly worked over and is so uniform (Liebich, BB. 2. 275, says that in AB. brū and its synonyms always have acc. of pers. as of thing) that there is little to add to what has already been said, except to point out the analogy between verbs of speaking and other verbs. Exactly as with a verb of speaking the direct personal object may take the place of the indirect, so with a verb of striking we have the personal acc. or the personal dative, and in both cases a personal genitive may sometimes (see below) take the place of the other two cases. Thus we have "shoot at" with dative or objective genitive, beginning with a combination of accusative and dative, "shoot a dart (acc.) at a person" (dat.), 1. 103. 3, or, what amounts to the same thing, at a person's body, e. g. AV. 6. 90. 1, yā́ṁ te rudrá íṣum ā́syad áṅgebhyo hṛ́dayāya ca, "the dart which Rudra shot at thee (thy) limbs and heart"; AV. 4. 6. 4,

[1] With the radical idea of adhī "learn," "go over," cf. Ch. 7. 1. 3, adhigā as "study" (like later adhigam) used for the first time. Compounds vyāhar, abhi°, and udāhar, "cite, say," occur thus first in Brāh. (see Up., below). Vijñā, know, teach, becomes in caus. "address."

yás ta ásyat . . níravocam ahám viṣám, "I have exorcised (nírvac) the poison (from the dart of him) who shot at thee." So one may curse a person (acc., normal use) or perhaps curse at (dat.) a person, yád dudróhitha śepiṣé striyāí, "if thou hast harmed or cursed at a woman." Yet as "curse" regularly takes the acc., the dative idea may here be suggested primarily by druh, "injure," which takes dative (and later, acc., loc., or gen.)[1]

The double accusative is now fully recognized, māi 'tad brūtha, "you say this to me" (followed by what is said), ŚB. 2. 2. 2. 20, as is the dative after a verb of speaking ("bid"), "bid (the horse to) come," etavāi brūyāt, etc.

5. The Dative in the Upanishads.

The dative of place, though not yet so common as in the epic, is well established. In my former paper, I have already cited BA. 4. 3. 19, "the bird bears itself to its nest," sallayāyāi 'va dhriyate, which is filled out with evāyam puruṣa etasmā antāya dhāvati, "hastens to that state," as ib. 16, ā dravati buddhāntāya. That the first case was felt as a place dative may be seen from the fact that the sentence is imitated in a later Up. with the acc., viz. Brahma, 1, yāti svam ālayam. To these may be added the similar "comes to" of Ch. 4. 1. 4 (sam-i with dat. = abhi-sam-i with acc.) and a case of the antithetical dative and ablative, BA. 4. 4, 6, tasmāl lokāt punar eti asmāi lokāya karmaṇas, "from that world (abl.) he goes back to this world (dat.) of action." Cf. ŚB. 12. 5. 2. 15, "may this (son) here be born out of thee, unto heaven," ayaṁ tvad adhi jāyatām asāu svargāya lokāya (on jan "get to" see my former paper). In BAU. 6. 2. 13–14, yadā mriyate/athāi 'nam agnaye haranti means "when he dies then they bring him to the fire," a passage which marks the (Up. ἅπ. λεγ.) word diṣṭam as later in the par-

[1] In the middle voice, "curse," śap, takes regularly a dative of one to whom one is under a curse, literally, e. g., "I have cursed myself to him" just like "promised him." In citing the curse-word it is used like a verb of speaking "if we swear with the word" (íti), etc. In the sense "beseech," obsecro, the acc. pers. with the middle is regular, though in the epic the dative may take its place (unless the te in epic śape te is acc., as is very likely).

allel of Ch. 5. 9. 2, tam pretam [diṣṭam] ito 'gnaya eva haranti.[1] With compounds there is the usual number of cases, karmabhyaḥ pratidhīyate, "established unto deeds," Āit. 2. 4; tābhyo gām ānayat, "led a cow to them," 1. 2. 2; but also tasmāi tṛṇaṁ nidadhāu, "laid him down a straw," Kena 19; santatyāi (nourishes self), "for continuity" (of worlds), Āit. 2. 3; asambhedāya, "to keep apart" (with genit.), Ch. 8. 4. 1; na tam iha darśanāya labhate, "gets to see him," "him to see," ib. 3. 1; darśanāya cakṣus, "the eye is to see," ib. 12. 4; dat. poss. ib. 4. 3. 6, yasmāi vā etad annam; BA. 1. 2. 1, bhavati. As for dat. and acc., since "hasten (to)" does not mark the goal, we have dat. antāya (above) but antaṁ gacchati, (acc.) when the goal is reached, BAU. 4. 1. 5 (4. 4. 3); and locative when an entrance into a person is meant, gacchanty asmin "go into him," opposed to abl. āgacchanti (asmāt) "come out of him," Māit. 6. 7. Compare "go" with dat. pers. tásmā enad gamayāmas, "we make this go to him," AV. 16. 6. 4 ("carry away to," dat. pers., ib. 3, 7, 11). The dat. in Brahma 1, svapnāya gacchati is not "goes to sleep" but "goes toward (the state of deep) sleep," as may be seen by the accompanying simile (of the creeping thing). In Sannyāsa 1, araṇye (loc.) gatvā is equivalent to an acc., "going to the wood" (not "going about in the wood,") as in 2, vanaṁ gacchati. The same locative occurs in Piṇḍa 2, dehe gate pañcasu, though here it is rather 'among.' To "prepare for," aparasmāi dhārayasva, "prepare-yourself for another (question)," BAU. 3. 8. 5, has one of the construction of yogya "fitted for," which takes either the dat. (or loc. or gen.) in nominal form (or inf.) in epic Sk. Cf. dhar above, p. 370, note 3.

In BAU. 5. 12. 1, the dative is used after "do good" (to), in the collocation kiṁ svid evāi' vaṁviduṣe sādhu kuryām, kim evā' smā asādhu kuryām, i. e. "is there any good I could do one (dat.) who has this knowledge, or any evil I could do him

---

[1] That diṣṭam anyway means the place is improbable. The dative follows "yield," tasmai vijihīte, "makes way to him," BA. 5. 10. 1; "able (to)," śaknoti grahaṇāya, "able to grasp," ib. 4. 5. 8; and in 6. 1. 7 interchanges with the locative of the subject of dispute, ahaṁ śreyase (Ś. dat.) vivadamānās, as against Ch. 5. 1. 6, loc. Instead of a place as object in 6. 2. 4, ājagāma yatra Jāibāler āsa, "he went where Jāibal's (house) was." With vas "live," the personal loc. is "live with him," the dat. is "lived to" (served), Ch. 4. 2. 5, asmā uvāsa.

(dat.)?"[1] The dative is here like that in Kāuṣ. 2. 7. (5), yad ahorātrābhyām pāpaṁ karoti, "what evil he does to day and night." Compare the analogous construction, tasmāi . . arhām cakāra, "he did him honor," Ch. 5. 3. 6; asmā arghyaṁ cakāra, BA. 6. 2. 4; trīṇy ātmane 'kuruta, "three for himself he made," BA. 1. 5. 1 and 3; namo vayaṁ brahmiṣṭhāya kurmas, BA. 3. 1. 2; yajamānasyā' 'tmavide 'vadānanaṁ karoti, Māit. 6. 33; pitṛbhyaḥ śrāddhatarpaṇaṁ kṛtvā, Sannyāsa 1. The locative is not used (Gītā 18. 68, bhaktim mayi parāṁ kṛtvā, the locative is after "faith").

After kar the genitive instead of the dative may be thought to be possessive rather than objective: BA. 6. 1. 13, tasyo me baliṁ kuruta, "make oblation of (to) me as such (cf. just below, tasyo me kim annan); ib. 6. 4. 26, asya nāma karoti; Kaṭha, 1. 7, tasya śāntiṁ kurvanti. In āyatanaṁ naḥ prajānīhi, Āit. 1. 2. 1; abhayaṁ kṛṇuhi viśvato nas, Mahānār. 20. 2, and tato no abhayaṁ kṛdhi, ib. 4, svasti no maghavā karotu, ib. 11; etāu me bahudhā prajāḥ kariṣyatas, Praś. 1. 4, the dative idea seems to interchange with the (poss.) genit. But the last two examples are certainly datives and probably the nas cases, because this verb has been so long used in purely dative construction. Thus in RV. there is little doubt that nas (kar) is usually dative, where asmábhyam, etc., interchanges. Cf. RV. kṛdhi várivas with nas or asmábhyam; kṛdhi urú nas or śárdhāya; bhāgáṁ nas or rátnaṁ yájamānāya kṛdhi; svastí no kṛdhi or svastím asme karati; śám (kar) with nas or dat.; sugám (kar) with nas or gṛṇaté; akar te or túbhyam brahma, etc. That is, the doubtful form is by analogy syntactically dative. In AV. 7. 113. 1, yáthā kṛtádviṣṭā 'so 'múṣmāi, "that you may be having-done-what-is-hated-to-him" (?), the dat. seems to be of the same sort.

Instead of dative or genitive, Rāmop. 30 = 4. 3 (p. 501, Ānandāś. text) has stutiṁ cakruś ca jagataḥ patim, "they praise-did (i. e. praised) the lord of the world," a periphrasis like a periph. pf., or "name-did" (with two acc. RV. 10. 49. 2, "they name-did me Indra"), or namaskuryāt pitṝn, Manu 3. 217. Namaskar itself takes dative or acc., tasmāi namaskṛtvā,

[1] On the form of question, cf. RV. 7. 55. 3, kím asmān duchunāyase; Tāitt. 2. 9. 1, kim ahaṁ sādhu nā 'karavam kim aham pāpam akaravam; Kaṭha 1. 5, kiṁ svid Yamasya kartavyam.

Māit, 6. 29 ff.; 7. 10; namaskṛtya bhagavantam, Vāsud. 1; the latter being later, māṁ namaskuru, Gītā 9. 34; in loc. only epic; in disjunct. form only with dative, a (late) RV. use, 10. 34. 8; 68. 12; 85, 17. Either verb or noun (=verb) might have produced the dative.

The accusative (= "do to") is found only in Śiras 3, kiṁ nūnam asmān kṛṇavat arātis, but this is RV. 8. 48. 3; cf. kíṁ tvā́ṁ cakā́ra, "what does he to thee," RV. 10. 86. 3; kím mā karan, "what do to me," RV. 5. 30. 9; 5. 2. 3; and so kím mā nindanti, "what blame they me," RV. 10. 48. 7. With "wrong" "sin," etc. the (double) accusative interchanges with locative: yás . . tvā́m ā́gāṅsi kṛṇávat, RV. 7. 88. 6; devā́n ā́gas, 1. 185. 8; mártān énas . . yáḥ karóti 7. 18. 18 ("do the gods a wrong," etc., double acc.); but locative of person in 10. 79. 6, kím devéṣu tyája énaś cakarthā́'gne; and so loc. in 4. 54. 3, ácittī yác cakṛmā́ dāívye jáne ("what sin commit upon the gods"). Doubtful is RV. 10. 29. 4, kád u dyumnám indra tvā́vato nṝ́n káyā dhiyā́ karase kán no ā́gan (cf. sumnám íyakṣantas tvā́vato nṝ́n, 2. 20. 1). The kím sentence also introduces a dat. (= serve), as in 3. 53. 14, kíṁ te kṛṇvanti, so 2. 29. 3. To "do for" (without obj. acc.), perhaps in 8. 46. 25, where vayáṁ hí te cakṛmā́ bhū́ri dāváne may mean "we have done much for thee that thou mayst give," or "done for thee that thou mayst give much," or perhaps bhū́ri belongs with both clauses. This is the later kiṁ te karavāṇi or karomi, whereas in tava priyam kartum and priyam kin cin mayi kartum the case of the pronoun depends on the adjective "to do what is liked of me" (dear to me).

In construing manas kar, "make up your mind (to)" "set your mind (on)" with dat. or loc., the Up. is on a par with other Sk. literature; no examples are needed. As with tapas (above), so in Ch. 6. 16. 1, paraśum asmāi tapata, "heat him an axe."

With bhū (as with dā) the dative yields to the genitive, bhavati hā 'sya svam, "the property becomes his," BA. 1. 3. 25 (possess. in nāma yad asya bhavati, ib. 1. 4. 1). The dative of price is represented, with an inversion, by a locative of that for which something is given (nimittasaptamī): sahasram etasyāṁ vāci dadmas, "we give a thousand for (on account of) this speech," BAU. 2. 1. 1; Kāuṣ. 4. 1.

With verbs of hearing the construction is genitive (regularly) or ablative (Ch. 7. 1. 3) of the person (cf. Ch. 4. 9. 3, śrutaṁ hy eva me bhagavaddṛśebhyas, "I have heard from men like you"). But in Ch. 7. 5. 2, tasmā evo 'ta śusrūṣante, there is a reversion to the old dative, "they desire to listen to him." In the same work, 7. 24. 1, anyac chṛṇoti, and 7. 13. 1, nāi 'va te kaṁ cana śruyus, "hears another (thing)," and "would not hear another (person)," the accusative of the object heard is used whether impersonal or personal (the Comm. supplies śabdam "any sound," in the last example).

6. Verbs of Speaking in the Upanishads.

The usage of the Upanishads embraces inherited types. So we find as late as Kaṇṭhaś, 2 (3), prajāpatim abruvan, followed by so 'bravīd brahmiṣṭhebhyas, "they addressed Prajāp." (acc.), "he spoke to them" (dat.). Ordinary usage may be illustrated by BA. 2. 1. 1, sa ho 'vācā' jātaśatrum . . brahma te bravāṇī 'ti, that is, the usual preterite is uvāca, the usual construction an accusative of the person addressed, but a dative of person if there is also an accusative of the impersonal object, "addressed him (acc.) 'I will tell thee (dat.) brahma'" (acc.). Neither second or third sg., nor second or third pl. of the pres. act. of brū are used; instead of which are found āttha, āha, —, āhus; brūte occurs in Brahma 1, and bravāma, brūtam occurs only with pra-. For uvāca are used abravīt, avocat, avadat, but not often (āha not uncommon as preterite).[1] The middle of brū is kept as such in the old Up., "call oneself," Jābālo bravīthās, "call thyself J.," Ch. 4. 4. 2; bravīta and avocathās, ib. 5. 3. 4; brahmiṣṭho bravīta, BA. 3. 1. 2. In Kāuṣ. 2. 3, artham bruvīta, "mention the thing," should be brūyāt (v. l.). The active voice is used in the same (med.) way in the epic, Mbh. 4. 19. 2, and perhaps this may be recognized in BA. 4. 1. 2, yathā mātṛmān brūyāt, "as one might say he had a mother"; in Māit. 7. 8, ity evam bruvāṇas follows a description! As in English, "say" is equal to "mean"; so nā 'ham bravīmi, "I don't mean" (that), without object, Ch. 7. 24. 2 (followed by iti ho' vāca); also BA. 2. 4. 13, na moham bravīmi, "I don't mean bewilderment"; so bhaṇ, e. g. ṇa khu aham mahābhāam

[1] Deussen's "sagen könnte" for (Ch. 5. 11. 5) uvāca, especially in view of 1. 10. 6; 4. 1. 5, is improbable.

bhaṇāmi. "I don't mean your honor," Śak. 3 (cf. Lat. hunc ais, "do you mean him"). The construction of verbs of saying is shared by those of thinking in the predicate use, jānāmy aham śevadhim ity anityam, "what is called treasure I know is transient," Kaṭh. 2. 10; sadma (tam) manye, "I regard him as a seat (of wisdom)," ib. 2. 13; 6. 11. But the subject-object is acc., hataś cen manyate hatam (sc. ātmānam; BG. 2. 19, enam), ib. 2. 19; as well as nom., svayaṁ dhīrāḥ paṇḍitā (v. l. °am) manyamānās, ib. 2. 5; Muṇḍ. 1. 2. 8; amuṁ lokaṁ jeṣyanto manyante, Ch. 8. 8. 5.

Before taking up the regular words of speaking, a few equivalents may be mentioned. Common as is udāhar in later Sk. (āhar as "speak" and, with "answer," "bring out a reply," is epic; in Up. only as "bring [to]," or "take to," Ch. 1. 2. 1, udgītham), it is comparatively rare here, followed by the regular dat. acc. as in Ch. 6. 4. 5, (no no 'dya) aśrutam udāharisyati, "cite us (dat.) an unheard of thing." It occurs only here with ind. obj. and in BA. 6. 2. 3, "recite" (pratīkas) with impers. object (AB. 7. 12. 7, "cite a Brāhmaṇa"); otherwise only in Māit. 6. 30 ff., atro' dāharanti, "here they cite" (vss. ff. without iti), as iti evaṁ hy āha in 26 introduces the same stanza (31); as "on dit" in Sūtra (AGS. 4. 6. 15, etc.). In the epic it even takes double acc. ("say a word to"). Another compound of the same root vyāharat (first in Brāh. as "speak"), in BA. 1. 4. 1. is "ejaculate" (anu°, Māit. 6. 6). Once or twice in the older works (as in Brāh.), Ch. 1. 3. 3, abhivyāhar (with vāc; Kāuṣ. 1. 6; Āit. 1. 3. 3, 11); cf. Ch. 8. 12. 4, abhyvyāhārāya vāk; cf. also vyācyaṁ vyākaroti, "articulates speech," Āit. 3. 1; nāmarūpe (vyākar), Ch. 6. 3. 2; BA. 1. 4. 7, etc.

The acc. dat. is used (or acc. is to be supplied) with vyākhyā, as in BA. 2. 4. 4, vyākhyāsyāmi te (sc. etad), and so in 4. 5. 5; cf. also anuvyākhyāsyāmi (etat te bhūyas), Ch. 8. 9. 3 ff.; upavyākhyānam, Ch. 1. 1. 1; Māṇḍ. 1; ptc. as noun, BA. 2. 4. 10; Māit. 6. 32, (anu-) vyākhyānāni, "comments"; pratyākhyā in BA. 6. 2. 8, ko hi tvāi' vam bruvantam arhati pratyākhyātum, "who can refuse you."

With vi the meaning is dis- (dispute) in vivad,[1] and ex- (explain) in vivac (with dat.), BA. 3. 8. 5; 9. 26; Ch. 5. 1. 6;

[1] On Ch. 5. 1. 6 and BA. 6. 1. 7. see above, p. 389. For the locative cf. Kaṭha 1. 29. yasminn idaṁ vicikitsanti, "concerning which men are here in doubt."

3. 5; so vibrū is explain, BA. 3. 4. 2 (absol. with vyācaks and vyapadiś), with acc. dat. BA. 4. 5. 4. With uktvā, "saying," and prabrūte "proclaims" (nāma), āmantrito is "addressed," BA. 1. 4. 1 (2. 1. 15; perph. pf. as in Ch. 4. 4. 1 and Kāuṣ. 4. 19).[1] "Blame" for paripravocan (tvā), Ch. 4. 10. 2, is doubtful (in the epic 12. 132. 6, vac alone has this meaning, kas taṁ vā vaktum arhati). As for vac="teach," cf. the use after adhīhi, "teach," in Ch. 7. 1. 1, "teach! I will teach (tell) you farther," adhīti . . . tatas ta ūrdhvam vakṣyāmi. "Repeat" (learn) is given by anu in anu-ah, "recite" (BA. 5. 14. 4; cf. 6. 3. 6),[2] anu-mantray (Kāuṣ. 2. 15 "calls after him," tam); BA. 6. 4. 5, with mantra; anuvac and anuvad, vedo . . ananūktas, "not learned," BA. 1. 4. 15 (5. 2. 3, anuvad "repeat"); anubrūte, ib. 16; yat kiṁcanā 'nūktam, "whatever one has learned," ib. 1. 5. 17; anūcāna, "a learned man," not common,[3] BA. 2. 1; Kāuṣ. 4. 1 (3. 2, anuvad, "repeat"); Ch. 6. 1. 2; anūcānatama, BA. 3. 1. 1; praśnam anubrūhi, "answer the question," Māit. 4. 5 (Veda-anuvacana, BA. 4. 4. 22); anūcya . . anuśāsti, Tāitt. 1. 11. 1. The causative of anuvac, as "invite," with objective dative, anuvācayati somāya, etc., is not found here (as in Sūtras). The epic admits it with objective genit. and acc. "promise to a person a thing." Unusual words: kīrti is common but unique is the verb kīrtayet, Māit. 6. 29, dat. acc.; cf. upāyanakīrti, "acknowledgment of," BA. 6. 2. 7. Instead of "spoken" we find vāg uccarati, "a voice rises," BA. 4. 3. 5; cf. uccāritamātras (śabdas), Māit. 7. 11. "Talk," bhāṣ as in Kāuṣ. 2. 4, with sam, api vātād vā sambhāṣamāṇas tiṣṭhet, "let him stand to windward and converse" (later, epic, with acc.). On bhāṣ and lap (Māitri and Kṣur. alone have gad) see below.

The most general word for speak is vad; often used without object, e. g. "let the pair speak first," agre vadatām, Ch. 1. 8. 2; cf. vada, "speak," BA. 3. 9. 10 ff. So avadan (AV. álapan) is a dumb man, BA. 4. 1. 2; yathā kaḍā avadanto vācā, "like

---

[1] Otherwise ā is not used with words of speaking (āhve, "call to oneself"); there is no āvad or āvac as in Vedic texts (on ālap, see below).

[2] "Some recite the Sāvitrī as an anuṣṭubh . . one should recite it as a gāyatrī," S. anuṣṭubham anvāhus . . gāyatrīm eva sāvitrīm anubrūyāt; *ib.* 6. 4. 14 ff. anubruvīta vedam.

[3] Cf. Mbh. 3. 133. 12 and 9. 51. 50. yo'nūcānaḥ sa no mahān, pendent to the proverb na hāyanāis, as in 12. 324. 6.

the dumb not speaking with the voice," BA. 6. 1. 8. For this reason the combination vadati vācā is regular, and when speech is personified she uses *vad*; compare vācaṁ vadanti and yena vāg abhyudyate, Kena 1 and 4 (abhivad, "address," ib. 17);[1] vācā vadan, Kāuṣ. 2. 14 and 3. 2; yat kalyāṇaṁ vadati; BA. 1. 3. 2; and vadiṣyāmy evā 'ham iti vāk, "said speech, 'I will speak'," BA. 1. 5. 21. In Ch. 5. 3. 6 = BA. 6. 2. 5, vācam abhāṣathās, and vācam bhāṣitā, BA. 6. 4. 18; yāvad bhāṣate, "as long as he talks," Kāuṣ. 2. 5; priyam bhāṣase, BA. 2. 4. 4, there remains an old word not elsewhere used (till Gauḍa 4. 99 and Gītā). Another rare but old word is lap, used in causative, Ch. 4. 2. 5, alāpayiṣyathās, "make speak"; according to Ś., ālāp°.

As a general word of utterance, "pronounce," however, vac is used as in Ch. 2. 22. 5, sarve svarā ghoṣavanto balavanto vaktavyās, "all vowels are to be pronounced voiced and strong." "Called" is ucyate, Māitri 2. 6. So "count" (not gaṇ), yāvanto nividy ucyante, BA. 3. 9. 1; ākhyāyante (gaṇāśas), BA. 1. 4. 12.

Perhaps the distinction is best given at this period by vad = speak, vac = say. Thus "said elsewhere," and "said before" are anyatrāpy uktam, prāguktam, Māitri 2. 6; 3. 3; 6. 4 and 5; and 5. 2.

Spoken words are indicated by "iti" without verb, passim, or with vac added, ity uktvā, Ch. 2. 24. 10 ff.: tathe 'ti ha yajamāna uvāca, ib. 1. 11. 3; sometimes followed by a speech ending with another iti, as in Ch. 1. 11. 3, tathe 'ty atha . . . iti, "yes (said he), but, etc.," where the speech is resumed and then again marked as ended. So atho khalv āhus, BA. 4. 4. 5 (4. 3. 14) may register an objection, "but they say"; yet compare atho 'tāpy āhus, iti (and moreover), Ch. 2. 1. 3. 'No' said he, and 'yes' said he, are expressed by ne 'ti ho 'vāca and tathā or om ity uvāca (mā . . iti "No!"), BA. 6. 2. 1, etc. But a quotation is more often given with a set phrase, as in Māitri 2. 2, ity evaṁ by āha, "so he (one) says" (and so in ff. 4. 3; 4. 6; 6. 1. ff.); ity evāi 'tad āha, with ity abravīt,[2]

[1] But abhivac, abhyuktam, "declared," is used only in a phrase, tad etad ṛcā, BA. 4. 4. 23: Kāuṣ. 1. 6, ślokena; Muṇḍ. 3. 2. 10; Praś. 1. 7.

[2] Abravīt is gnomic here: asti brahme'ti brahmavidyāvid abravīd brahmadvāram idam ity evāi 'tad āha yas tapasā 'pahatapāpmā, "Brahma is, so says he that possesses brahma-knowledge; this is the brahma-door, so also he says, who is freed from evil through austerity" (Comm. etad as 'this'; but see below).

Māitri 4. 4; sa ha smā 'ha . . iti, BA. 5. 12. 1; and the formula iti ha smā 'ha followed by the name of the person quoted, Śāṇḍilyas, Ch. 3. 14. 4; Kāuṣītakis, Kāuṣ., 2. 1, 6; Pāiṅgya, 2. 2; Yājñavalkyas, BA. 1. 4. 3 (5. 1. 11). Another phrase is introduced by tad dha, as in tad dha smā 'ha Prātṛdaḥ pitaram . . iti, BA. 5. 12. 1; tad (but Ś. tad as brahma here) dho 'cus . . iti, BA. 6. 1. 7; with uvāca, ity ho 'vāca, Ch. 1. 8. 3 ff., 5. 12. 1; BA. 5. 14. 8; Māitri, 2. 2; Kena 26; sa ho 'vāca . . iti, Kāuṣ. 1. 1; 4. 3; Ch. 1. 11. 2; 4. 3. 5; 4. 4. 4; 4. 10. 3 and 5; BA. 3. 1. 2; Kaṭh. 1. 4; te ho 'cus, ib. 5; uvāca . . iti Ch. 4. 4. 5.

The plural regularly indicates "they say" (on dit): tad āhus . . iti, BA. 3. 9. 9 (ity ācakṣate, ib.)[1]; ekī-bhavati na vadatī 'ty āhus, BA. 4. 4. 2; tad (utā 'py) āhus . . iti (meaning by another iti), Ch. 2. 1. 2; 7. 11. 1; (ity) eva tad āhus, Ch. 2. 1. 2 and 3; tasmād āhus . . iti, ib. 3. 17. 5; with vadanti . . iti. Ch. 2. 24. 1, the subject is definite, brahmavādinas; but in Ch, 6. 4. 5, tad vidvāṅsa āhus; so Māitri 6. 7; "some say," ity eka āhus, BA. 5. 12. 1; ity u hāi 'ka āhus, BA. 1. 3. 27 (5. 12. 1); 1. 5. 15; tad dhāi 'ka āhus, Kāuṣ. 3. 2; Ch. 6. 2. 1; atrāi 'kā āhus . . iti, Māitri 6. 30. The optative having this indefinite subject is supplied by brū: yas . . brūyāt . . iti, Ch. 1. 8. 6; brūyāt . . iti, "let him say," Ch. 3. 16. 2 ff.

The construction of these verbs may be arranged as above, thus: they take (a) an impersonal acc.; (b) a personal acc.; (a)+(b); (c) a predicate acc.; (d) an impersonal acc. and personal dative; (e) a personal dative. Finally the acc. may be interpreted as the object not of address but of discussion (f) "about" which or whom something is said.

(a) impers. acc.: kim bravīmi, Ch. 6. 7. 2; tad bravītu Ch. 6. 1. 4; yām eva vācam abhāṣathās (tām eva me brūhi, ref. above); satyaṁ vadati, Ch. 7. 17. 1; (artham) vadet, "tell the subject," Ch. 5. 11. 6; yad avocam . . iti . . ity eva tad avocam, "in saying this I said (meant) that," Ch. 3. 15. 5; iti sa yadā'ha . . ity evāi 'tad āha, "when he says . . he means," BA. 1. 3. 28.

(b) pers. acc.: putram āha . . iti, BA. 1. 5. 17; taṁ jāyo 'vāca . . iti, Ch. 1. 10. 7; 4. 10. 2 ff.; tam āha, Kāuṣ. 1. 6;

[1] This is found in Ch. 1. 3. 6, etc.; chiefly old Up.; tam . . indra ity ācakṣate (v. l. indram ity), BA. 4. 2. 2; Āit. 1. 3. 14; yad bhūtaṁ ca . . ity ācakṣate, BA. 3. 8. 3; Tāitt. 1. 3. 1, etc.; Kāuṣ. 2. 5 (4) and 15 (10); pratyācakṣ is "refuse," Tāitt. 3. 10. 1; Kāuṣ. 2. 1.

dīkṣitam āhuḥ satyaṁ vade 'ti, BA. 3. 9. 23; paśyantam āhus . . iti, BA. 4. 1. 4; vācam (pers.) ūcus, BA. 1. 3. 2; anyad vadet, "speak to that other," BA. 4. 3. 31; iti ha Kauṣītakiḥ putram uvāca, Ch. 1. 5. 2, 4; 1. 8. 3, 6; tam uvāca, sa ha tam uvāca . . iti, Ch. 1. 10. 2, 8 ff.; 4. 1. 5; 4. 1. 7; 4. 4. 4, 5; 5. 3. 1; 5. 3. 4; 6. 7. 3; iti mā bhagavān avocat, Ch. 1. 11. 4; usually in standing phrases, sā hāi 'nam uvāca . . iti, Ch. 4. 4. 2; taṁ ha pito 'vaca . . iti, ib. 6. 1. 1; taṁ ho 'vāca, Kāuṣ. 1. 3 ff.; Kena 25; tān ho 'vāca . . iti, Ch. 1. 12. 3; 5. 1. 7; 11. 4 and 7; Māitri 2. 3; 4. 1, etc.; BA. 3. 1. 2; atha ho 'vāca Satyayajñam . . iti, Ch. 5. 13. 1 ff.; tāu ha Prajāpatir uvāca kim . . iti, Ch. 8. 7. 3 ff.; atha hāi nam . . uvāca . . iti . . iti ho 'vāca, "he addressed him and said," Ch. 1. 11. 1. With iti may go tad etc. as in tad dha smā 'ha . . pitaram . . iti, BA. 5. 12. 1, where the pronoun may be adverbial or bring the clause under (a) + (b), below.

The clause above, tāu ha Prajāpatir uvāca kim, etc., Ch. 8. 7. 3, implies "ask," and this is not a rare connotation, cf. āhus in Ch. 8. 6. 4. The accusative also occurs in a good many cases after a combination of verbs of speaking and transitive (motion) verbs as in Kāuṣ. 4. 1, Ajātaśatrum etyo 'vāca . . iti; Ch. 1. 12. 2, tam . . upasametyo 'cus . . iti; and so ib. 3; 4. 4. 3; 5. 1. 7, pitaram etyo 'cus; ib. 12; cf. taṁ ho 'vācā 'nanuśiṣya vāva kila mā bhagavān abravīd anu tvā 'śiṣam iti, "he addressed him (saying) 'without indeed instructing me spake (addressed ?) my lord (saying) I have instructed thee'," Ch. 5. 3. 4 (see note).[1]

I have been at pains to give the many examples of this construction with other verbs in order to show its comparative rarity with brū. This marks the later epic style sharply from that of the Upaniṣads and is one of the countless minor points

---

[1] This verb anuśās, "teach," Ch. 4. 2. 2, takes dat. and acc. in anu ma etāṁ devatām śādhi: obj. acc. in Kena 3 (tad); pers. acc. BA. 1. 5. 17, etc.; Tāitt. 1. 11. 1; Ch. 4. 2. 4; 4. 9. 2, etc. In Māitri 4. 1. anuśādhi tvam (asmākam! so Comm.) the words gatir anyā na vidyate follow, and it is rather harsh to connect asmākam with this clause; but see below. As there is always elsewhere an obj. pers. or impers. mā (above) would seem to be governed by ananuśiṣya. There is no case of double acc. with this verb (as in epic). The meaning teach may also be given by adhi-i, as in Tāitt. 3. 3. 1. by vijñāpaya, with two acc. (epic gen. as 'say' to), Ch. 6. 5. 4 (pers. acc. alone in phrase of Kāuṣ. 1. 1, etc.); Kāuṣ. 3.1. etc.

always emerging to correct unhistorical bias in regard to the age of the epic.

With the optative, in Ch. 2. 22. 3, sa tvā prativakṣyatī 'ty enam brūyāt; nāi 'vāi 'nam brūyus pitṛhā 'sī 'ti, ib. 7. 15. 3 (answers to evāi 'nam āhus, ib. 2, "say to him"); taṁ ced brūyus . . iti ("if they should say to him . . " followed by sa brūyāt . . iti); ib. 7. 15. 4; 8. 1. 1 ff.

As a preterite, enam abruvan . . iti, Āit. 1. 2. 1; tā abravīt, Āit. 1. 2. 3 (5, abrūtām); athāi 'nam abrūma . . iti, BA. 3. 3. 1; so 'bravīt Patañcalaṁ kāpyaṁ yājñikāṅś ca . . iti, BA. 3. 7. 1 (three times); iti rājānam abravīt, Māitri 1. 2; prajāpatim abruvan (taṁ ho 'vāca), ib. 2. 1 and 3; tam abravīt, Kaṭha 1. 16 (no iti); and combined with a verb of instructing, Ch. 5. 3. 4 (above).

These few cases should be compared with the multitude of pers. acc. after ah, vac, of the Upaniṣads and with the regular mām, tam, etc. abravīt of the epic, where it has become a formula. It is the more surprising since the preterite of brū without pers. acc. is common enough in Up.

Unique is vad with person. acc. In Ch. 5. 3. 7, yathā mā tvam avadas, "since you have addressed me" (the construction belongs to a later period).[1] It is not in the BA. 6. 2. 8 parallel.

In BA. 5. 14. 8, etad dha vāi tad Janako Vāideho Buḍilam Āśvatarāśvim uvāca (yan nu ho tadgāyatrīvid abrūthā atha kathaṁ hastī bhūto vahasī 'ti), there is a combination of the impersonal and personal accusative which, however, may be no more than a combination of the impers. as adv. with the person. acc.: "J. spake thus to V.," or "this following said J. to V." The Comm. takes tat as tatra, "in this regard." Compare the usual phrase tad dhāi 'tad in (d) below. This combination of (a) and (b) is common enough later, but rare in the Upaniṣads. In so late a thing as Piṇḍa 1. 1, brahmāṇam idam abruvan there is a parallel to yan māṁ vadasi, Gītā 10. 14; but earlier Up.

[1] PW. gives no examples earlier than the epic for vad, "address," with pers. acc.; but see below for a doubtful case in Ch. Of course abhivad in this sense is common BA., Ch., Kena, etc.; also as "speak about," abhyūde, Ch. 4. 14. 2: samudire, "spoke among themselves," ib. 4. 10. 4. (see below); vivad, "dispute," locative, Ch. 5. 1. 6, etc.; ati°, ib. 7. 16. 1 (Māitri 4. 5, ativādy asi); anu°, Kāuṣ. 3. 2; BA. 5. 2. 3; prati°, Kaṭha 1. 15 (above).

scarcely recognize the construction. Just as above we have vad uniquely with pers., so the earliest case here is with vad, yathā mā tvaṁ tadāi 'tān avadas, Ch. 5. 3. 5. But to understand this clause it must be observed that with etān the word praśnān "questions" is to be supplied, and the construction may be that of a verb of asking, "as thou hast (said) asked me these (questions)," as just before this stands pañca mā praśnān aprākṣīt, "he asked me five questions," with the (regular) double acc. The passage seems to be incomplete (so Deussen); in form it is like that of 5. 3. 7 (above, yathā mā tvam avado yathā). Another passage in Chānd. also presents a difficulty like that of the combination-construction spoken of above: 5. 11. 7, tān ho 'vāca prātar vaḥ prativaktā 'smī 'ti . . tān hā 'nupanīyāi 'vāi 'tad uvāca, "he addressed them (saying) 'I will reply to you in the morning . . thus [this] even without initiating them he said." Here the personal acc. is induced primarily by the gerund and etad is adverb rather than object (i. e. "without initiating them he spoke as follows"). Compare below (d) the note on prati-compounds.

It is a mark of the lateness of Māitri[1] that the personal object in this class of verbs is found in the genitive, tad asmākam brūhi (cf. anuśādhi asmākam, above, but the latter is doubtful), 2. 3, preceded by vidyā . . asmākam bhagavatā Māitriṇā 'khyātā 'haṁ te kathayiṣyāmi. So in 4. 5, śreyaḥ katamo yaḥ so 'smākam brūhi, "tell us which is the better part (not with Max Müller "which is best for us"). Also in 7. 10, eteṣām uktam, "declared to." In 1. 2. (sc. ātmatattvam), no (=asmabhyam acc. to Rāmat.) brūhi, may be genitive (the genit. in BA. 6. 2. 6, mānuṣāṇām brūhi, is partitive). In Śvet. 6. 23 (also a late Up.) tasyāi 'te kathitā hy arthāḥ prakāśante mahātmanas, the genitive may depend on kath (as above in Māitri), especially since prakāś (a common verb) takes no such (Up.) objective case. Later Sk., though retaining the dative as well, uses this genit. construction; doubtful are me, te, Gītā 10. 19, hanta te

[1] Cf. also the late vocabulary; sūcay, "describe," 3. 1; uśanti=opine, 2. 7; bhūtātman, tanmātra, mahābhūta, 3. 2; cakravartir, 1. 4; tatstha, 6. 10. 16; mātṛka, 7. 11. These words are all late (cf. my *Great Epic*, p. 33 ff.); cf. also gad, which, as nigad, occurs in Sūtras (in Mbh. 8. 83. 29 it takes double acc.), and once in Kṣur. Up. 10, otherwise only in Māitri 1. 2, gāthāṁ jagāda. Cf. also naṭa, raṅga, etc. in Māitri 7. 8.

kathayiṣyāmi, etc. In Kena 32, uktā ta upaniṣad . . ta upaniṣadam abrūma, the te is probably dative (as below).[1]

The predicate acc. (c) is not often found but is represented (both adj. and noun) sufficiently in the older Up., no bhavān purā'nuṣiṣṭān avocat, "you said I was instructed," BA. 6. 2. 3 (so ib. 1. 5. 17, putram . . lokyam āhus); the periphrasis with iti, āhur darsapūrṇamāsāv iti, "they assert the new- and full-moon sacrifices" (to be intended), ib. 1. 5. 2. Cf. °manoyuktam bhakte'ty āhus, Kaṭha 3. 4 (3. 1, vadanti with pred. acc.). In Ch. mahāntam asya mahimānam āhus, "great they say is the greatness of him," 4. 3. 7; cf. yan na suvijñeyam āttha, Kaṭha 1. 22; indriyāṇi hayān āhus, ib. 3. 4; 6. 10; yenā 'hur manọ matam, "whereby they say thought is thought," Kena 5; tam āhur agryam puruṣam mahāntam, Śvet. 3. 19. Compare also BA. 4. 4. 9, tasmin . . nīlam āhus, "on it they say is dark-blue."

As predicate with vac, "teach," prāṇaṁ ca hā 'smāi tad ākāśaṁ co 'cus, "they taught him (declared to him) that (Brahma) as breath and space," Ch. 4. 10. 5 (after asmāi prabravāma, "let us teach him").

With vad, Tāitt. 1. 1. 1, tvām eva brahma vadiṣyāmi, "I will declare thee as Brahma," only here and ff. (1. 12. 1), till the later Up.

After a verb of perception it is noticeable that the nom. in a simile may stand in agreement with the obj. accus.: tā aśme 'va . . sthāṇur iva tiṣṭhamānā apaśyat, "he saw them (acc.) standing (acc.) like a stone (nom.), like a post (nom.)," Māitri 2. 6; cf. with kar, ibid., sa vāyur ivā 'tmānaṁ kṛtvā, "making himself (acc.) like wind (nom.)."

The impersonal acc. and personal dative (d). The construction is too common to require a heap of instances; it will suffice to show how contiguous, almost inseparable in Sk. are the shades of meaning in "speak," "proclaim," "teach," as rendered in English; to illustrate the usual phraseology; and to interpret doubtful by means of certain examples. The points can be taken together.

tam (udgītham) . . Udaraśāṇḍilyāyo 'ktvo 'vāca. . . iti, "on declaring (teaching) this to U. he said . . ," Ch. 1. 9. 3; tad dhāi 'tad . . Kṛṣṇāyo 'ktvo 'vāca . . iti, Ch. 3. 17. 6 (here the

[1] Epic construction with acc. has dat. e. g. kathayāmāsa Śatrughnāya kathās, R. 7. 71. 5.

pronoun refers to the view just explained); tad dhāi 'tad Brahmā Prajāpataya uvāca . . putrāya pitā . . provāca . . tat putrāya . . prabrūyāt, Ch. 3. 11. 4–5; tad dhāi 'tat Satyakāmo Jābālo Gośrutaye . . uktvo 'vāca yady apy enac chuṣkāya sthāṇave brūyāt . . iti, Ch. 5. 2. 3. Here the same construction is used with the verb of speaking and that of proclaiming or teaching, viz. the dative of the person, and this is the case in brahma me vakṣyati, BA. 2. 1. 15, as *ib.* 2. 5. 16, idaṁ vāi tan madhu . . Aśvibhyām uvāca. So tat tubhyam avocan, BA. 6. 2. 4; tāṁ vidyāṁ tubhyaṁ vakṣyāmi, ib. 8 (cf. ib. 6. 3. 7). Hence in te 'haṁ tad vakṣyāmi, BA. 4. 2. 1; tad eva me brūhi, ib. 2. 4. 3; tāu (praśnāu) me brūhi, ib. 3. 8. 2 ("tell i. e.: answer me these questions"; but in 1, "I will ask him two questions, double acc. with prakṣyāmi, followed by tāu cen me vakṣyati); yat te kaścid abravīt, ib. 4. 1. 2; brahmaṇaś ca te pādam bravāṇī 'ti bravītu me bhagavān iti tasmāi ho 'vāca . . agniṣ ṭe pādaṁ vakte 'ti, etc., Ch. 4. 5. 2–6. 1 ff.; bhagavāṅs tv eva me kāme brūyāt, Ch. 4. 9. 2; tan me bhagavān bravītu, Ch. 7. 1. 5 ff.; tam eva no brūhi, Ch. 5. 11. 6; uktā ta upaniṣad, Kena 32; the same dative is to be assumed as follows prabrū, e. g., prabrūhy asmā iti tasmāi hā 'procyāi 'va, Ch. 4. 10. 2. Cf. brahma te bravāṇi, Kāuṣ. 4. 1; tat te bravāṇi, Kaṭha 2. 15 (tām uvāca tasmāi, Kaṭha 1. 15, tam uvācā 'ṅgire, Muṇḍ. 1. 1. 2). So also with a verb of explaining, tam me vyācakṣva, BA. 3. 4. 1; (etad) vyākhyāsyāmi te, vyācakṣāṇasya tu me nididhyāsasva, BA. 2. 4. 4 = 4. 5. 5; ye nas tad vyācacakṣire, Kena 3 (vicacakṣire, Īś. 10, 13); taṁ cen me na vivakṣyasi, BA. 3. 9. 26. The construction is just that of giving something to one; cf. the parallel in Māitri 6. 29, etad guhyatamam . . nā'śāntāya kīrtayet . . sarvaguṇasampannāya dadyāt.

So also pratipad "declare," which occurs with vācam as early as RV., takes acc. and dat.; prakṣyanti mām . . tebhyo na sarvam iva pratipatsye, "they will question me and I shall very likely not declare to (answer) them everything." Ch. 5. 11. 3 (acc. without dat. ib. 6. 7. 4).[1]

---

[1] In BA. 1. 4. 8, pratipede is "declared" (no pers. obj.), but ib. 3. 8. 1, as in Ch. 4. 9. 2, it is "replied" (to a question). Usually in speech-words prati takes an acc. pers., as in Ch. apṛccham mātaraṁ sā mā pratyabravīt, "I asked mother, she answered me" (as follows), Ch. 4. 4. 4; tam u ha paraḥ pratyuvāca, "and the other answered him," Ch. 4. 1. 3 and

(e) personal dative without non-personal accusative. Here it is not always clear whether the word means "declare (this to)" or simply "speak (to)." In many cases the iti following or the object to be supplied suggests that the former is the proper meaning, as also when the passive form implies "addressed" as "instructed" (te . . tatho'ktasya mayā, "of thee thus instructed by me," Ch. 1. 11. 5). Thus in Ch. 4. 5. 2; 6. 3 ff., te pādam bravāṇī 'ti, bravītu me bhagavān iti, tasmāi ho 'vāca . . iti (with a paragraph of instruction before iti), it is evident that bravītu = pra° and uvāca is "declared (it) to him." Similar is the tasmāi ho 'vāca in 4. 2. 5, although no iti follows (agniṣ ṭe pādaṁ vaktā, 4. 6. 1, etc., shows the object). Compare ib. 4. 10. 4, atha hā 'gnayaḥ samudire . . hantā 'smāi prabravāme 'ti, tasmāi ho 'cus . . iti; 4. 14. 1–3, te ho 'cus . . ācāryas tu te gatiṁ vakte 'ti . . kim . . te 'vocan . . ahaṁ tu tad vakṣyāmi . . bravītu me . . tasmāi ho 'vāca, although no iti follows the final word, and uvāca may here be rendered "he spoke to him" or "he declared it to him." But it is safe to assume that the dative regularly implies an accompanying accusative, as in kathaṁ te nā' vakṣyam (cf. tasmāi hā 'procya, 4. 10. 2, "not teaching him"), "why shouldn't I have told (taught) you," 5. 3. 5, save in cases where an iti precedes. But even with a precedent iti it is probable that an acc. is really to be supplied. Thus in BA. 3. 7. 1, after a description of the string and "inward director," as described by the Gandharva, Gautama says iti tebhyo 'bravīt tad ahaṁ veda, which may be "thus he spoke to them (and so I know)" or "thus he described (it) to them (and I know it)." The latter, however (cf. abravit with acc. just before), is preferable. Müller translates, "Thus did he say to them, and I know it"; Deussen, "da erklärte er es jenen, und so weiss ich es." In BA. 4. 1. 2 (preceded in 1 by taṁ ho 'vaca), abravīn me . .

2. 3.(ib. 5. 11. 7, prativaktā 'smi, without objective, and so pratiśuśrāva, ib. 4. 5. 1 and elsewhere). The apparent double acc. in Ch. 7. 15. 2 with pratyah is due to one being used adverbially, pitaraṁ kiṁcid bhṛśam iva pratyāha, "he answered his father something rude" (= somewhat rudely). In AV. this combination has only acc. impers. obj.; in Kāuṣ. 1. 2, taṁ yaḥ pratyāha, tam pratibrūyāt (prati with ācakṣ and with ākhyā, BA. 6. 2. 8; Kāuṣ. 2. 1; Tāitt. 3. 10. 1, is "speak again" = "refuse," ko hi tv evam bruvantam arhati pratyākhyātum, etc.). In Kaṭha 1. 1. 15 pratyavadat (tat) is "repeated" (a late meaning). "Address" (acc.) and "reply" (absol.), are ah and pratyah, BA. 1. 5. 17.

vāg vāi brahme 'ti, "he said to me . . 'speech is Brahma'," the quotation corresponds to a preceding yat te káscid abravīt, "what any one did say to you," and in the following, na me 'bravīt has an object accusative understood ("he did not tell to me the resting-place"). In BA. 5. 2. 1 ff. bravītu nas . . tebhyo hāi'tad akṣaram uvāca da iti . . dāmyate 'ti na ātthe 'ti (the next begins enam ūcus, "they addressed him"), there can be no doubt (*pace* PW.) that nas is dative, as in BA. 5. 12. 1, tasmā u hāi 'tad uvāca vī 'ti, etc.; cf. tāṁ (vidyāṁ) tv ahaṁ tubhyaṁ vakṣyāmi (cited above).

But in Gītā 12. 8, nivasiṣyasi mayy eva ata ūrdhvaṁ, na saṁśayaḥ, "after this" is unquestionably the meaning of ata ūrdhvam. So also in BA. 4. 3. 14 ff. ata ūrdhvaṁ vimokṣāya brūhi and in Ch. 7. 1. 1, tatas ta ūrdhvaṁ vakṣyāmi, the only places where this phrase appears with verbs of speaking, it is better to take the phrase adverbially than (as Deussen does) equivalent to a noun, "speak farther than this for salvation," "I will speak to you farther than this." It would be to draw too fine a line to say that the dative cannot still be used alone; although the tendency is to restrict the dative after a verb of speaking to instances where the direct object is expressed or understood.

An apparent difference between sg. and pl. is observable in Praśna. Thus in 1. 2, tān ha sa ṛṣir uvāca . . sarvaṁ ha vo vakṣyāma iti, "the seer addressed them with the words I will tell you (it) all," but ib. 4, tasmāi sa ho 'vāca, and so in 2. 2; 3. 2 (also te 'ham bravīmi); 4. 2; 5. 2 (6. 1, tam abruvam and te nā'vakṣyam); 6. 2; but in 6. 6 again, tān ho 'vāca. In both uvāca means "said to," followed by what is said; but when the dative is used an explanation follows, so that it is equivalent to "I will teach you as follows," "he taught them as follows"; whereas no explanation follows in the case of tān uvāca, one example of this introducing and the other concluding the whole discussion, "he addressed them" (but without instruction), as is the case with tam abruvam, "I addressed him."

So in Kaṭha, vac and brū with personal acc. are "speak to," 1. 4; 1. 16, with acc. of thing, expressed or understood, "tell" (= prabrū), e. g. brūhi nas tat, "explain it to me," 1. (13, 14) 15, 29; cf. 2. 15, tat te (padam) saṁgraheṇa bravīmi (ib. 5. 6) with Gītā 8. 11, tat te padaṁ saṁgraheṇa pravakṣye. In 1. 15, the

genitive depends not on the verb of speaking but on tuṣṭas, athā 'sya mṛtyuḥ punar evā 'ha tuṣṭaḥ.

(f) The accusative "about" whom or which anything is said. This is a recognized type, but it is not common in Up. and certainly a good many (if not all) cases even here are really acc. after a verb of declaring or addressing. For example, in BA. 3. 9. 10, veda vā ahaṁ tam puruṣam . . parāyaṇaṁ yam āttha, "I know the person whom thou declarest (as) the final source;" although "of whom (i. e. about whom) thou speakest" (Müller) is correct enough as an English version. Again, in BA. 6. 4. 28, taṁ vā etam āhur atipitā batā 'bhūs, Müller and Deussen render "they say of such a son"; but the second person shows that the literal meaning is "they address him with the words 'thou has become superior to thy father'," (so Böhtlingk). Compare BA. 3. 9. 22, pratirūpaṁ jātam āhur hṛdayād iva sṛptas . . iti, "they say to a son who is the image of his father 'slipped out of the heart'" (better than with Böhtlingk "they say of a son"). Such also is the meaning given by Böhtlingk and Müller (not by Deussen) to the acc. in BA. 1. 4. 8, sa yo 'nyam ātmanaḥ priyam bruvāṇam brūyāt priyaṁ rotsyatī 'tī 'śvaro ha tathāi 'va syāt, "he may be sure of it who says 'he will lose what is dear' to one who declares another than the self (to be) dear."[1] It is at least very doubtful whether anyone of these examples is to be rendered by "about." In the passive construction, as in Ch. 4. 1. 4, sa mayāi 'tad uktas (not "spoken about" but) "herewith is he declared by me" is the literal meaning. So in the constant use of āhus, as in ity evāi 'nam āhus, "so they declare him," Ch. 7. 5. 2; kam enam āttha, ib. 4. 1. 3, 5; adadānam . . āhur āsuro bate 'ti, ib. 8. 8. 5; satyaṁ vadantam āhur dharmaṁ vadatī 'ti, "they declare that one who speaks true speaks right," BA. 1. 4. 14 (compare instances of predicate with iti, above). Similar is the usage with ācakṣ, not only in taṁ Skanda ity ācakṣate, "him they call Skanda," Ch. 7. 26. 2; yad yajña ity ācakṣate, "what they call sacrifice," Ch. 8. 5. 1; sa brahma tyad ity ācakṣate, "breath (sa, sc. prāṇaḥ) is brahma that yon, they say," BA. 3. 9. 9; but also in tasmād enam svapitī 'ty ācakṣate, "they declare him asleep," Ch. 6. 8. 1 (not with PW., deshalb sagt

[1] In Āit. 1. 3. 13, kim ihā 'nyaṁ vāvadiṣat, the meaning seems to be "what would one say (to be) other" (this form, 'vāvadiṣat or vā'vadiṣat (?), is found in the Benares text as well as in Ānandāś.).

man von ihm), predicate with iti as if double acc. All these go back to and rest in the utterance-idea solely, "one proclaims it," with or without predicate. Compare ne 'yāyate svapitī 'ty ācakṣate, "(when a man) does not move they declare he sleeps," Praśna 4. 2; goaśvam iha mahime 'ty ācakṣate, "they regard cattle as greatness," Ch. 7. 24. 2; vatsaṁ jātam āhur atṛnāda iti, BA. 1. 5. 2; puruṣam pretam āhur vyasraṇsiṣatā 'syā 'ṅgānī 'ti, "they describe the dead with the words 'his limbs have relaxed'," BA. 3. 7. 2. So saṁvad with acc. and following quotation, Āit.Br. 3. 2, is "together describing the child they say 'it wants to hear.'" The expression "about" is rendered clearly by the locative, not only with vivad (med.), above, but with this saṁvad, as in BA. 2. 1. 2 and the corresponding passage in Kāuṣ. 4. 1, mā māi 'tasmin saṁvadiṣṭhās (v. l. saṁvādayiṣṭhās, "do not address me (v. l. make me converse) about him." Cf. agnihotre samūdāte (v. l. ūdatuḥ), BA. 4. 3. 1. An emendation in this last passage makes sam enena vadiṣya iti out of sa mene na vadiṣya iti, a doubtful form for this period.[1]

In the Upanishad period, as in that of the Saṁhitās, I have gone very minutely into the construction of words of speaking, because they have never been exhaustively worked over and the material is syntactically important. To sum up: The earliest Vedic use admits a dative of the person after a verb of speaking, whether an accusative (of what is said) accompanies the dative or not. At the end of the Rig Veda and in the Atharva Veda (where the later Brahmanic style is beginning to get the upper hand), this construction yields to the use of a personal accusative after some of the verbs of speaking, just as the dative with "praise" or "sing" yields to the accusative. In the Upanishads, the usage is Brahmanic, that is, the accusative has become regular, but the dative is also found occasionally, and as with other verbs (and in patois) the objective genitive begins to be substituted (compare sparh, "desire," first with dative, later with genitive of thing or person, and also with acc. of pers., and as "envy," in its later sense, with any of the three cases).

[1] The Comm. as "he thought I will not say anything to," na vadiṣye kiṁ cid api rājñe. For reasons against the sam enena v. l., cf. Deussen, *Sechzig Up.*, p. 463.

In concluding (for the present) this investigation of the dative case, I would call attention again to the point so often ignored by classical scholars, to whom the dative still remains a "personal case," that, namely, the great mass of *dative infinitives* must be duly weighed in the balance of meaning before one can pronounce the case especially a case of personal regard. The dative is quite as much an infinitive case as it is a personal case; is, in fact, the chief infinitive case. Then again, as to its being a place-case and as to the identity (from vagueness) of ablative and dative in Sanskrit plurals, we have living specimens as parallels. For example, as friend Grierson reminds me, there is the Shān ending *tī*, "to" and "from," the word itself meaning "place," and being used with person or place indifferently to indicate "to" or "from" according to the context (see *Ling. Surv.*, vol. 2, p. 92).

PROCEEDINGS

OF THE

AMERICAN ORIENTAL SOCIETY,

AT ITS

MEETING IN PHILADELPHIA, PA.

1907.

The annual meeting of the Society was held in Philadelphia, Pa., on Thursday and Friday of Easter week, April 4th and 5th, in the rooms of the American Philosophical Society, 104 South 5th street.

The following members were present at one or more of the sessions:

Barton,	Foote,	Jastrow,	Ogden,
Barret,	Gottheil,	Jewett,	Oliphant,
Bender,	Gray,	Johnston,	Peritz,
Berry,	Mrs. Gray,	Miss Letson,	Prince,
Bloomfield,	Haas,	Lanman,	Mrs. Stevenson,
Bolling,	Harper,	Metheny,	Toy,
Brown,	Haupt,	Michelson,	Ward,
Chandler,	Hinke,	Montgomery,	Welden,
Clay,	Hirth,	Moore, J. H.	Williams, F. W.
Collitz,	Hock,	Miss Morris,	Williams, Talcott
Currier,	Hooper,	Mueller,	Woods,
Easton,	Hopkins,	Nies,	Yohannan.
Ember,	Miss Hussey,	Oertel,	
Fisher,	Jackson, A. V. W.		

Total, 58

The first session began on Thursday morning at quarter past eleven, with Professor Toy in the chair.

In the absence of Professor Moore, the chair appointed Professor Hopkins to act as Recording Secretary.

The reading of the minutes of the last meeting, held in New Haven, Conn., April 17th and 18th, 1906, was dispensed with,

having already been printed in the Twenty-seventh volume of the Society's Journal.

On motion of Professor Lanman it was voted to omit in future from the manuscript record of the minutes such matter as is to appear in printed form in the Society's Journal.

The Committee of Arrangements, through Dr. Talcott Williams, welcomed the Society to Philadelphia, and announced that the University Club extended its privileges to the members of the Society during their stay in Philadelphia; that a luncheon would be given to the Society by the Oriental Club on Thursday at one o'clock; that the Historical Society invited the Society to a reception on Thursday evening; and that arrangements had been made for a dinner on Friday evening at seven clock, at the Hotel Edouard.

The succeeding sessions of the Society were appointed for Thursday afternoon at half past two, Friday morning at ten, and Friday afternoon at half past two.

The Corresponding Secretary, Professor Hopkins, reported as follows:

Letters of acceptance have been received from all those elected to membership at the last meeting with the exception of two elected to corporate membership. It is desirable that members should not be proposed for membership in future before their assent has been received. Several members unable to be present have sent greetings to the Society. A notice was received from the Smithsonian Institution announcing the death of Samuel Pierpont Langley, late Secretary of that institution. To the list of our exchanges have been added Al-Machriq, The Catholic Press, Beirut, Syria; Le Monde Oriental, Upsala, Sweden; and the American Journal of Archæology. The Free Museum of Science and Art, University of Penna., has been added to the list of recipients of the Journal.

The following extract from a letter received from Mr. Montgomery Schuyler, of the American Legation at Bucharest, relative to his former residence in Siam, was then read by the Corresponding Secretary:

Hitherto the French are the only people to take an interest in the wonderful ruins in Siam and Indo-China, but I am sure that we could do fine work in that field if the attention of our Orientalists were drawn to it in the proper manner. The number of fascinating problems for the investigator in that part of the world is so large that I was simply overwhelmed during my residence in Siam, and my transfer to Roumania and Servia after a year gave me too little opportunity for study in the Far East . . . Even the inscriptions in Sanskrit which are being constantly found in Siam in the ruined "wats" have never been properly studied by well-equipped students. One day as I was walking by chance on one of the terraces of the large temple at the town of Prapatoom I

came across an inscription in Devanagari characters which I am sure would have been of interest, but unfortunately I was not able to stop to make a satisfactory tracing of it and I have never been there since that time. If the Carnegie or some other fund would devote a small part of its revenue to aiding archeological research in Siam it would be well repaid by the results. The Pali used in the Siamese Buddhist works is another subject full of interest.

The President of the Society, Professor Toy, has handed his resignation to the Secretary. Professor Torrey, as will appear from the report of the editors, has resigned from the post of Semitic editor.

The Secretary has to announce the death of the following members of the Society.

HONORARY MEMBERS.

Professor Ceriani, of the Ambrosian Library at Milan.
Professor Ferdinand Justi, of Marburg, Germany.

CORPORATE MEMBERS.

Professor Hoppin, of Yale University.
Rev. Mr. E. J. Young, of Waltham, Mass.

SECTION FOR THE HISTORICAL STUDY OF RELIGIONS.

Rev. Charles S. Sanders, of Aintab, Turkey.
William W. Newell, of Cambridge, Mass.

CORRESPONDING MEMBERS.

Professor G. I. Ascoli, of Milan.
Dr. A. G. Paspati, of Athens, Greece.

Tributes were paid to Professors Ceriani and Ascoli by Professor Bloomfield; to Professor Ceriani by Professors Lanman and Gottheil; to Professor Justi by Professor Jackson; to Professor Hoppin and Rev. Mr. Sanders by Professor Hopkins; and to Mr. Newell by Professor Toy.

The report of the Treasurer, Professor F. W. Williams, was presented, as follows:

The Treasurer has the honor of presenting his annual report of the financial condition of the Society to its members. The items in his account do not differ materially from those of preceding years excepting in the sum of $369.60 devoted to binding, a sum which will have to be nearly doubled this year before the periodicals and journals in the library are brought into a safe and useful condition. This expenditure

has been more than offset during the past year by the receipt of $411.54 from sales of our own publications, an unusual amount which we cannot hope to equal in another year. The cost of printing the Journal of the Society comes to $1726.16, which with the honorarium to its editors and incidental expenses brings the total yearly disbursement to almost exactly $2000.00, not including charges for the library. Against this expenditure we have received this year a gross revenue of $1907.84—a decidedly larger amount than our average. The deficit has been met by withdrawing $394.48, the Life Membership Fund and accrued interest deposited in the Suffolk Savings Bank. As the Bradley and Cotheal Funds cannot be used for the general expenses of the Society, there are now only the remaining accumulations of some $225.00 in accrued interest and the thirteen shares of Bank Stock to be drawn upon to meet an annual deficit of about $400.00, which may be considered as normal under the present policy of the Society. To maintain the high quality of its scholarly work and influence the Society should be able to count upon the support of at least three hundred and fifty paying members and the interest upon invested funds to the amount of ten thousand dollars.

RECEIPTS AND DISBURSEMENTS BY THE TREASURER OF THE AMERICAN ORIENTAL SOCIETY FOR THE YEAR ENDING DECEMBER 31, 1906.

Receipts.

Balance from old account, Dec. 31, 1905,			$ 482.79
Dues (209) for 1906	$1044.75		
" (54) for other years	264.47		
" (13) for Hist. S. R. Sect.	26.00		
		$1,335.22	
Sales of publications		411.54	
Life Membership Fund		300.00	
State Nat. Bank Dividends		109.10	
Annual Interest, Suffolk Savings Bank		13.44	
" Prov. Inst. for Savings		37.75	
" Nat. and Conn. Savings Banks		.79	
			2207.84
			$2,690.63

Expenditures.

T., M. & T. Co., printing vol. XXVI[ii]	$811.04
" " vol. XXVII[i]	772.32
" sundry	43.13
" paper	142.80
Binding	369.60
Honoraria to editors	200.00
Librarian, postage and express	29.29
Treasurer, postage	1.84
Balance to general account	320.61
	$2,690.63

STATEMENT.

	1905	1906
I. Bradley Type Fund (N. H. Savings Bank)	$2,297.44	$2,414.21
II. Cotheal Publication Fund (Pr. Inst. Savings)	1,000.00	1,000.00
III. State National Bank Shares	1,950.00	1,950.00
IV. Life Membership Fund (Suffolk Savings Bank)	300.00	
V. Connecticut Savings Bank deposit	5.52	5.92
VI. National Savings Bank deposit	10.50	11.23
VII. Accrued Interest in II	69.63	107.38
VIII. " " IV	81.04	94.48
IX. " " V and VI	.34	1.13
X. Cash on hand	331.78	117.62
	$6,046.25	$5,701.97

Professor Jackson reported on the subscription made by members of the Society to the Oriental Bibliography and asked for further contributions.

The report of the Auditing Committee, Mr. J. D. Jackson and Mr. A. P. Stokes, was presented through the Secretary, as follows:

In the absence of my colleague, Mr. John Day Jackson, I have made an audit of the accounts of the American Oriental Society and hereby certify that I have examined the account-books of the Treasurer of the Society and have found the same correct, and that the foregoing statement showing the total assets to be $5701.97 and the total receipts and expenses for the year to balance at $2690.63 is correct. I have also compared the bills and vouchers, and statements of balances accompanying the same and have found them to be correct.

ANSON PHELPS STOKES, JR.

Auditor for the Society.

The Librarian, Professor Hanns Oertel, presented his report, as follows:

A STATEMENT OF THE PRESENT CONDITION AND URGENT NEEDS OF THE LIBRARY

of the American Oriental Society submitted to the members at the April meeting at Philadelphia, 1907.

Article II of the constitution of the American Oriental Society enumerates four "objects contemplated by this Society." Of these four the third and the fourth involve an expenditure of money. They are: "3. The publication of memoirs, transactions, vocabularies, and other communications presented to the Society" and "4. The collection of a library and cabinet."

It is thus clear that the founders of the Society and the framers of its constitution wisely attributed equal importance to the publication of the Society's Journal and the collection of the Society's Library. As the Journal was to be an outlet for the scientific activity of the Society so its Library was intended to become a handy tool for its members and an important depository for Oriental books in this country.

But in the matter of money appropriations this theoretical and desirable equality of the Journal and the Library has never received recognition.

The annual appropriations for the publication of the Journal are about $1900 (viz. about $1700 for the printing of the Journal and $200 as honorarium for the editors). The annual appropriation for the Library usually has been about $20 (i. e. just enough to defray the cost of postage and express). At no time has it been sufficient to allow even the binding of our accessions, which has resulted in an accumulation of many unbound volumes. The past year was the first in which the sum of $370 was drawn from the treasury for the purpose of binding a part of the large accumulation of unbound volumes.

The policy of assuming that the Library will run itself tends to result in loss and disorder and cannot safely be continued in the future. There are two logical ways of dealing with the Society's Library. One is to leave it in a chaotic state and destroy its usefulness but effect a saving of money. The other is to make it useful to our members and keep it in proper condition. (It should be borne in mind that section IV of the By-Laws imposes upon the Librarian the duty of keeping a catalogue of all books belonging to the Society.) The minimum cost of this has been estimated in the Report which follows. An inadequate, careless, or incomplete cataloguing will be a source of vexation only, involving the outlay of money without obtaining adequate returns.

The experience of the past year has clearly shown that in the management of a Library of the size of ours there is a large amount of work with which the Librarian cannot be charged. Just as little as the editors of the Journal can be expected to set type, print, and mail the Journal (though a saving might thus be effected), just so little can the Librarian be charged with the clerical work of typewriting catalogue-cards, labelling, accessioning, and acknowledging. In the present state of the Library the supervision of these things and assistance in cataloguing consumes a very large amount of time and is all that can be expected of him. Provision should be made so that competent help may be procured and paid for. In this case, and in this case only, can we hope to have within a reasonable time a Library which, by means of a carefully printed catalogue, will be useful to all our members and of which the Society need not be ashamed.

As the Treasurer's Report shows an annual and chronic deficit of about $300 and as the appropriation for the Journal cannot be cut down without most seriously interfering with the Society's activity and standing, it becomes a most serious and pressing problem to take at once such steps as will increase the Society's revenues.

II. *The work done this year; April 1906–April 1907.*

The work done during the past year consisted

A. In drafting a general scheme for cataloguing the Society's Library:

B. In cataloguing a part of the old books; and

C. In taking care of the accessions.

The old books catalogued were

1, The printed manuscript-catalogues.

2, The Bibliotheca Indica (3 series) and the Bombay Sanskrit Series.

3, The Serials of which the Society has about 100 sets in progress of publication and 50 no longer published.

In the majority of cases these books, before they could be catalogued, had to be bound and labelled. Much time is consumed in preparing some of them for the binder (e. g., the volumes of the Bibliotheca Indica). The character of our books is, moreover, such that the gathering of the data necessary for properly cataloguing them requires not only much time and labor but also assistance of a very high class, both difficult to obtain and expensive. The task was further complicated by the necessity of making out lists of the volumes wanting in every series. These lists of desiderata were mailed in February to the Learned Societies, Academies, etc., with which the Society exchanges, with a request to assist us, as far as possible, in completing our sets, and it is hoped that these requests will meet with a generous response. This particular phase of the work, however, impressed in the strongest possible way the absolute necessity of keeping a careful watch over our serial accessions, in order to avoid gaps which often cannot be filled after the lapse of a certain time.

About 1550 volumes have been *labelled* and about 1500 volumes have been *catalogued.*

EXPENSES. For the *binding* of books $369.66 were spent. In order to help defraying this expense a circular letter addressed to the larger Libraries of the world was sent out, offering to them the full set of our Journal at the reduced price of $63.75 and single volumes at 20% discount. As a consequence, $204 were turned into the treasury, received from such special sales of our Journal, and a bill for $63.75 is still outstanding. (This sum of $267.75 is over and above the usual sale of the Journal.)

For the rest of the work none of the Society's money has been expended. But a statement of the cost is here appended.

1. The work done in preparing the books for the binder and labelling them may be estimated at 40 working days of an assistant at $2. This does not include the expert help necessary to prepare volumes like those of the Bibliotheca Indica for the binder, but takes into account the simple manual work only.

2. The work done in cataloguing the books may be estimated at $255. This is on the supposition that 85 working days at $3 would be consumed in this work, which allows for about 18 titles a day. The nature of the books in our Library makes such a figure, if anything, too high: and the wages are put at an exceedingly low figure.

To this should be added—

For assisting in drafting the general plan for the arrangement of the Society's Library, 3 days' services of a cataloguer at $3, amounting to $9.

For making out, etc., of the list of desiderata 10 days' time of such a cataloguer, amounting to $30.

The sum total of the cost of cataloguing this portion of the old books of the Library would, therefore, have amounted to $374.

To this should be added about $65 for taking care of the annua accessions to the Library (accessioning, acknowledging, etc.). [See the detailed statement below, IV.]

The money value of the work so far expended on the Society's Library, exclusive of binding, janitor services, and other items of such character, is therefore equivalent to about $436, figuring wages at the lowest possible cost. In reality $500 would probably come nearer to what we should have had to expend on this work. For the successfu completion of this work the Society stands indebted to Miss Margaret D. Whitney [see Librarian's Report, Journal vol. 27, p. 468–9]. Miss Whitney did not only herself spend a part of each day at the Library but also obtained the assistance of a number of ladies, and collected a small sum of money to hire additional help.

III. *The work that remains to be done to bring the cataloguing of the Society's Library up to date. Estimated Cost.*

1. Binding. It is estimated that about one-half of the unbound books in the Library have now been bound. The expense so far has been about $370. There remain then a little less than one-half of unbound volumes. It is estimated that the cost of binding these will be $350.

Note 1: It is impossible to keep books and periodicals in proper order and condition without binding them. It is equally impossible to let them go out of the Library unless they are bound. Consequently the usefulness of our Library is impaired in proportion to the number of unbound volumes, especially as most of our members cannot consult the books in New Haven.

Note 2: It should be borne in mind that about two-thirds of last year's expense for binding was defrayed by money derived from an extraordinary and special sale of our Journal. The market for such a sale is now exhausted and a similar income cannot be looked forward to for the ensuing year.

2. Cataloguing. Apart from new accessions there remain now uncatalogued about 3500 books.

(a) *Labelling.* The proper labelling and stamping of these (assuming that 100 books can be handled in the course of a working day) will occupy 35 days of an assistant at $2, with a total cost of $70.

(b) *Cataloguing proper.* There are about 250 volumes labelled and stamped but not yet properly catalogued and with the other 3500 books the number of books to be catalogued may be estimated at 3750. This task should occupy about 190 working days of a cataloguer at $3. with a total cost of $570. This calculation supposes that he will handle about 18 titles a day. This figure may seem low, but the difficulty of determining the proper details of entries is so great that even with the help of expert advice the work will be slow. The use of accented type in the typewriting of transliterated titles is, of itself, a source of considerable delay.

The total cost of cataloguing the remaining portion of the Library may thus be estimated at $990.

IV. *Estimated Cost of administering the Library after it has been brought up to date. Estimated Annual Budget of the Library.*

1. Serials. We have about 95–100 serials which increase every year by a volume. Almost all of these come unbound, the majority in fascicles. They require (a) binding, (b) accessioning, (c) labelling and stamping, (d) acknowledging, and (e) cataloguing.

(a) *Binding.* The cost may be estimated at $1 per volume. On the basis of 100 accessions this item would amount to $100.

(b, c, d) *Accessioning, labelling of bound volumes, stamping and acknowledging.* This may be estimated to comsume about 8 days of an assistant at $2. Total expenses $16.

(e) *Cataloguing.* Assuming that of the 100 volumes 90 per cent are continuations of old series and 10 per cent. are new (such as fascicles of the Bibliotheca Indica), involving some search, it is estimated that four working days of a cataloguer at $3 will be required. Total cost $12.

2. New books. Annual accessions from this source may be roughly estimated at from 175–200. About 75 per cent. of these are bound. The expense involved would be

(a) *Binding* 50 vols. at $1 apiece—$50.

(b) *Labelling*, 2 days' work of an assistant at $2—$4.

(c and d and e) *Accessioning, acknowledging, and cataloguing.* Estimating 20 titles a day, 10 working days of a cataloguer at $3—$30.

3. Estimated postage for sending foreign and home acknowledgments—$10.

4. Estimated cost of typewriting the Library correspondence, billing, postage—$10.

5. Library-cards, stationery, etc.—$10.

6. There should be a regular annual allowance

(a) for the purchase of odd volumes to complete a set or series where the volume or volumes lacking are out of print or cannot be obtained as a gift.

(b) for the purchase of certain necessary bibliographical helps, such as Aufrecht's Catalogus Catalogorum or Minerva. Something like $50 should be appropriated for this purpose.

The annual Budget would thus amount to $298.

The Library thus urgently needs (1) an appropriation of $1000 to be expended in cataloguing the remaining portion of the books, and (2) an annual appropriation of $300 (i. e. about one-sixth of what is at present appropriated for the Journal).

All of which is respectively submitted by your Librarian.

New Haven, Conn. March 20th, 1907.

On motion of Professor Jackson the Society expressed its thanks to Miss Margaret D. Whitney and the ladies who helped her in preparing a catalogue of the library, and to Mr. Julius

Hotchkiss, to Mr. Schwab of the Yale Library, and to Mr. Whitney of the Branford library, for aiding in the same work.

The report of the Editors of the Journal, Professors Hopkins and Torrey, was presented by Professor Hopkins, as follows:

The twenty-seventh volume of the Journal was issued in two parts; the First Half appearing August 1st, 1906, and the Second Half March 12th, 1907. The volume contained 489 pages in all, or 464 pages exclusive of the Proceedings, List of Members, etc.

The Editors wish to call attention once more to the fact of an annual deficit of about three hundred dollars, due to the cost of publication of the Journal. So long as the Journal continues to have its present size, this annual deficit will be unavoidable. The Editors feel strongly that the size of the Journal ought not to be reduced, and that the change from two numbers to one number yearly would be unfortunate. Extensive and careful inquiry has shown that the cost of printing in New Haven is not greater than it would be elsewhere in America. There is great need, therefore, that the income of the Society be increased without delay by at least the amount of this deficit.

The members of the Society who contribute papers for publication in the Journal are urged to give them as nearly as possible their final form before sending in the manuscript to the editors. The re-writing of articles after they have been put in type has caused great waste of time and money, nearly every year, as well as a good deal of unnecessary delay in the appearance of the Journal.

The Editor of the Semitic section of the Journal, who has just completed his seventh year of service, finds himself obliged to resign his office, owing to pressure of other work, and has asked the Directors to appoint another in his place.

The following persons, recommended by the Directors, were elected members of the Society:

HONORARY MEMBERS.

Professor Hartwig Derenbourg. Professor T. W. Rhys Davids.

CORPORATE MEMBERS.

Prof. J. Cullen Ayer.
Miss Alice M. Bacon.
Prof. George R. Berry.
Prof. Julius A. Bewer.
George F. Black.
Rev. Philip Blanc.
Prof. Albert T. Clay.
Prof. Hughell E. W. Fosbroke.
Marquis Antoine Frabasilis.
Mr. Leo Frachtenberg.
Prof. J. B. Game.
Rev. Elihu Grant.
Mrs. Louis H. Gray.
Rev. Dr. W. M. Groton.
Rev. Dr. W. J. Hinke.
Miss Lucile Kohn.
Miss E. J. Letson.
Mr. J. Renwick Metheny.
Prof. Lucius H. Miller.
Mr. J. B. Sargent.
Prof. Charles M. Shepard.
Captain C. C. Smith.
Mrs. Sara Yorke Stevenson.
Prof. George Sverdrup.
Prof. William C. Thayer.

MEMBERS OF THE SECTION FOR THE HISTORICAL STUDY OF RELIGIONS.

Mr. M. A. Lane. Prof. Patterson DuBois.

The committee appointed at New Haven to nominate officers (Messrs. Moore, Jackson, and Jastrow: see Journal, vol. 27, p. 471) reported through Professor Jackson as follows:

The committee, having received the resignation of Professor Toy from the presidency, nominate as his successor one of the Vice-Presidents, Professor Lanman, whose long services to the Society render this recognition peculiarly appropriate and whose rank as a scholar makes him a most fitting candidate. In regard to the Secretaries, Treasurer, and Librarian, the Committee see no reason to make any changes, and they therefore nominate the following officers:

President—Professor Charles Rockwell Lanman, of Cambridge, Mass.

Vice-Presidents—Dr. William Hayes Ward, of New York; Professor Maurice Bloomfield, of Baltimore; Professor Paul Haupt, of Baltimore.

Corresponding Secretary—Professor E. Washburn Hopkins, of New Haven, Conn.

Recording Secretary—Professor George F. Moore, of Cambridge, Mass.

Secretary of the Section for Religions—Professor Morris Jastrow, Jr., of Philadelphia.

Treasurer—Professor Frederick Wells Williams, of New Haven, Conn.

Librarian—Professor Hanns Oertel, of New Haven, Conn.

Directors—The officers above named; and President Daniel Coit Gilman, of Washington; Professor Crawford Howell Toy, of Cambridge, Mass.; Professor Robert F. Harper, of Chicago; Professors Richard Gottheil and A. V. W. Jackson, of New York; Professor Henry Hyvernat, of Washington; Professor Charles C. Torrey, of New Haven.

The officers thus nominated were unanimously elected.

Professor Hopkins reported from the Directors that they had ordered power of attorney to be given to E. Washburn Hopkins to act for the Treasurer, Professor F. W. Williams, during the absence of Professor Williams from the country. Professor Jewett, Dr. Gray, and Professor Barton were appointed by the Chair a committee to nominate officers at the first session of the next annual meeting.

At quarter past twelve Professor Toy delivered his address entitled "A Review of Work in the Oriental Languages during the Past Year."

At one o'clock the Society took a recess till half past two.

At two forty-five the Society met for its second session and proceeded to the reading of papers, Professor Lanman being in the chair. The following communications were presented:

Professor Barton, of Bryn Mawr College, Methods of investigating the origin of the Cuneiform Syllabary.—Remarks were made by Professor Jastrow.

Professor Bloomfield, of Johns Hopkins University, On repeated verse lines and stanzas in the Rig Veda [read in abstract].

Rev. Mr. Chandler, of Madura, India, Nayaka Kingdoms in South India.—Remarks were made by Professor Lanman.

Mr. Aaron Ember, of John Hopkins University, Word-formation and loan-words in Modern Hebrew.

Dr. Foote, of Johns Hopkins University, Note on Amos i. 3.

Dr. L. H. Gray, of New York, On certain Persian and Armenian month-names as influenced by the Avestan.

Professor Haupt, of Johns Hopkins University, Xenophon's account of the fall of Nineveh.

Professor Hopkins, of Yale University, The sniff-kiss in ancient India.—Remarks were made by Rev. Mr. Chandler, Professors Mueller, Lanman, and Toy.

Professor Jackson, of Columbia University, Some notes on the history of India.

Professor Lanman, of Harvard University, Palicisms in the Sanskrit of the Tantra-ākhyāyikam.—Remarks were made by Professor Hopkins and Mr. Michelson.

At five o'clock the Society adjourned, to meet on Friday at ten o'clock.

The Society met on Friday morning at ten o'clock with Professor Lanman in the chair. The following communications were presented:

Mr. Michelson of Ridgefield, Conn., Notes on the inscriptions of Asoka.—Remarks were made by Professors Lanman and Hopkins.

Mr. J. H. Moore, of Columbia University, A metrical analysis of the Pāli Iti-vuttaka, a collection of discourses of Buddha.—Remarks were made by Mr. Michelson and by Professors Lanman and Hopkins.

Professor Mueller, of Philadelphia, Observations on the letter *heth* in Northern Semitic.

Mr. Ogden of Columbia University, Some examples of Sāyaṇa's treatment of the Vedic subjunctive.—Remarks were made by Professors Bloomfield, Haupt, Hopkins, Gottheil, and Mr. Michelson.

Professor Johnston, of Johns Hopkins University, Notes on *nubattu* and *u'iltu*.—Remarks were made by Professors Jastrow and Bloomfield.

Mr. Oliphant, of Johns Hopkins University, A study of the Vedic dual; the dual of bodily parts.

Professor Prince, of Columbia University, [two papers read in abstract] A Sumerian hymn to Nergal, and The English

Rommany jargon of the American roads.—Remarks were made by Professor Jastrow, Dr. Ward, and Professors Lanman, Bloomfield, and Hopkins.

Dr. Gray, of New York, On the Madras text of Subandhu's Vāsavadattā.—Remarks were made by Professor Hopkins.

Professor Haupt, of Johns Hopkins University, [two papers read in abstract] The cuneiform name of the cachalot, and The etymology of *cabinet.*

Professor Jackson, of Columbia University, [read in abstract] Merv, the ancient Zoroastrian city in Turkistan.

Professor Johnston, of Johns Hopkins University, Some new cuneiform letters.

At one o'clock the Society took a recess till half past two.

At half past two the Society met for a short business session before resuming the reading of papers.

The Corresponding Secretary reported for the Directors that the next annual meeting would be held in Cambridge, Mass., beginning on April 23d, 1908. A committee of arrangements was appointed, consisting of Professors Lanman, Lyon, and Hopkins.

The Directors further reported that they had appointed Professors E. Washburn Hopkins and Professor Lewis B. Paton Editors of the Journal for the ensuing year. Professors Torrey and Mr. Anson Phelps Stokes, Jr., were appointed auditors for the year 1907–1908.

The following resolution was unanimously adopted:

The American Oriental Society desires to express sincere thanks to the American Philosophical Society for the use of its rooms; to the Oriental Club and Historical Society of Philadelphia for their generous hospitality; to the University Club of Philadelphia for courtesies extended to the Society; and to the Committee of Arrangements for their efficient services.

At two forty-five the reading of papers was resumed with Professor Toy in the chair.

The following communications were presented:

Miss Margaretta Morris, of Philadelphia, Magic and morals in Borneo.—Remarks were made by Professors Jastrow, Hopkins, and Toy.

Professor Clay, of the University of Pennsylvania, The Aramaic endorsements on the business documents of Murâshû Sons.—Remarks were made by Professor Toy.

Professor Jastrow, of the University of Pennsylvania, The liver in Babylonian divination.

Mr. Metheny, of Philadelphia, Road-notes in Cilicia and Northern Syria.—Remarks were made by Dr. Ward.

Rev. Mr. Chandler, of Madura, India, The Jesuit Mission in Madura in the seventeenth century.

Dr. Foote, of the Johns Hopkins University, Visiting sins upon the innocent.—Remarks were made by Professor Toy.

Professor Lanman, of Harvard University, Buddhaghosa and his treatise on Buddhism entitled The Way of Purity.

Professor Montgomery, of the Protestant Episcopal Divinity School, An Aramaic inscription from Guzney, Cilicia.—Remarks were made by Professor Jastrow.

Mr. Welden, of the University of Pennsylvania, A Note to Rig Veda, 10. 137. 7.—Remarks were made by Professor Hopkins.

At five o'clock the Society adjourned, to meet in Cambridge, Mass., April 23d, 1908.

The following communications were read by title:

Professor Barton, of Bryn Mawr College, The text and interpretation of Ecclesiastes 5[19].

Dr. Blake, of Johns Hopkins University, (*a*) A bibliography of the Philippine languages; (*b*) Contributions to comparative Philippine grammar. II. The numerals; (*c*) Connective particles in the Philippine languages; (*d*) Notes on Hebrew phonology.

Professor Gottheil, of Columbia University, Ḥasan ibn Ibrāhīm ibn Zūlāk and his Ta'rīkh Miṣr wa-Faḍ'āiliha.

Professor Haupt, of Johns Hopkins University, The name Istar.

Professor Hopkins, of Yale University, Aspects of the Vedic Dative.

Mr. Michelson, of Ridgefield, Conn., Preliminary report on the linguistic study of the Vāyu Purāṇa.

Professor Mills, of Oxford, The Ahuna Vairya and the Logos.

Professor Mueller, of Philadelphia, The last years of the Persian rule in Egypt.

Mr. Oliphant, of John Hopkins University, Was there a lost myth—Indra and the Ants?

Mr. Quackenbos, of Columbia University, Classical allusions to the pearl and pearl-fisheries of Persia and India.

Dr. Yohannan, of Columbia University, Persian Notes.

List of Members.

Revised, December, 1907.

The number placed after the address indicates the year of election.

I. HONORARY MEMBERS.

M. Auguste Barth, Membre de l'Institut, Paris, France. (Rue Garancière, 10.) 1898.

Dr. Ramkrishna Gopal Bhandarkar, C.I.E., Dekkan Coll., Poona, India. 1887.

James Burgess, LL.D., 22 Seton Place, Edinburgh, Scotland. 1899.

Prof. T. W. Rhys Davids, Harboro' Grange, Ashton-on-Mersey, England. 1907.

Prof. Berthold Delbrueck, University of Jena, Germany. 1878.

Prof. Friedrich Delitzsch, University of Berlin, Germany. 1893.

Prof. Hartwig Derenbourg, 30 Avenue Henri-Martin, Paris, France. 1907.

Prof. Adolph Erman, Steglitz, Friedrich Str. 10/11, Berlin, Germany. 1903.

Prof. Richard Garbe, University of Tübingen, Germany. (Biesinger Str. 14.) 1902.

Prof. Karl F. Geldner, University of Marburg, Germany. 1905.

Prof. M. J. de Goeje, University of Leyden, Netherlands. (Vliet 15.) 1898.

Prof. Ignaz Goldziher, vii Holló-Utcza 4, Budapest, Hungary. 1906.

George A. Grierson, C.I.E., D.Litt., I.C.S. (retired), Rathfarnham, Camberley, Surrey, England. Corporate Member, 1899; Hon., 1905.

Prof. Ignazio Guidi, University of Rome, Italy. (Via Botteghe Oscure, 24.) 1893.

Prof. Hendrik Kern, 45 Willem Barentz-Straat, Utrecht, Netherlands. 1893.

Prof. Franz Kielhorn, University of Göttingen, Germany. (Hainholzweg, 21.) 1887.

Prof. Alfred Ludwig, University of Prague, Bohemia. (Königliche Weinbirge, Kramerius-gasse 40.) 1898.

Prof. Gaston Maspero, Collège de France, Paris, France. (Avenue de l'Observatoire, 24.) 1898.

Prof. Theodor Noeldeke, University of Strassburg, Germany. (Kalbsgasse 16.) 1878.

Prof. Richard Pischel, University of Berlin, Germany. (Halensee, Joachim Friedrichstrasse 47.) 1902.

Prof. Eduard Sachau, University of Berlin, Germany. (Wormser Str. 12, W.) 1887.

Prof. ARCHIBALD H. SAYCE, University of Oxford, England. 1893.
Prof. EBERHARD SCHRADER, University of Berlin, Germany. (Kronprinzen-Ufer 20, N. W.) 1890.
Prof. JULIUS WELLHAUSEN, University of Göttingen, Germany. (Weber Str. 18a.) 1902.
Prof. ERNST WINDISCH, University of Leipzig, Germany. (Universitäts Str. 15.) 1890. [Total, 25.]

II. CORPORATE MEMBERS.

Names marked with † are those of life members.

Rev. Dr. JUSTIN EDWARDS ABBOTT, Tardeo, Bombay, India. 1900.
Dr. CYRUS ADLER, U. S. National Museum, Washington, D. C. 1884.
F. STURGES ALLEN, 246 Central St., Springfield, Mass. 1904.
Miss MAY ALICE ALLEN, 256 Edgewood Ave., New Haven, Conn. 1906.
Mrs. EMMA J. ARNOLD, 275 Washington St., Providence, R. I. 1894.
Prof. WILLIAM R. ARNOLD, Theological Seminary, Andover, Mass. 1893.
Dr. KANICHI ASAKAWA (Yale University), 385 Winthrop Ave., New Haven, Conn. 1904.
Rev. EDWARD E. ATKINSON, 94 Brattle St., Cambridge, Mass. 1894.
Prof. J. CULLEN AYER (P. E. Divinity School), 5000 Woodlawn Ave., Philadelphia, Pa. 1907.
Miss ALICE M. BACON, 4 Mansfield St., New Haven, Conn. 1907.
Hon. SIMEON E. BALDWIN, LL.D., 44 Wall St., New Haven, Conn. 1898.
LEROY CARR BARRET, Princeton, N. J. 1903.
Prof. GEORGE A. BARTON, Bryn Mawr College, Bryn Mawr, Pa. 1888.
Prof. L. W. BATTEN, 232 East 11th St., New York. 1894.
Prof. HARLAN P. BEACH (Yale University), Kuling, China. 1898.
Prof. WILLIS J. BEECHER, D.D., Theological Seminary, Auburn, N. Y. 1900.
HAROLD H. BENDER, Johns Hopkins Univ., Baltimore, Md. 1906.
Rev. JOSEPH F. BERG, Port Richmond, S. I., N. Y. 1893.
Prof. GEORGE R. BERRY, Colgate University, Hamilton, N. Y. 1907.
Prof. JULIUS A. BEWER, 700 Park Ave., New York, N. Y. 1907.
Dr. WILLIAM STURGIS BIGELOW, 60 Beacon St., Boston, Mass. 1894.
Prof. JOHN BINNEY, Berkeley Divinity School, Middletown, Conn. 1887.
GEORGE F. BLACK, Lenox Library, Fifth Ave. and 70th St., New York, N. Y. 1907.
Dr. FRANK RINGGOLD BLAKE (Johns Hopkins Univ.), Dixon Park, Mt. Washington, Md. 1900.
Rev. PHILIP BLANC, Johns Hopkins University, Baltimore, Md. 1907.
Rev. DAVID BLAUSTEIN, Educational Alliance, 197 East Broadway, New York, N. Y. 1891.
FREDERICK J. BLISS, Clifton Springs, New York.
FRANCIS B. BLODGETT, General Theological Seminary, Chelsea Square, New York, N. Y. 1906.
Prof. CARL AUGUST BLOMGREN, Augustana College and Theol. Seminary, Rock Island, Ill. 1900.

Prof. MAURICE BLOOMFIELD, Johns Hopkins University, Baltimore, Md. 1881.

Dr. ALFRED BOISSIER, Le Rivage près Chambésy, Switzerland. 1897.

Dr. GEORGE M. BOLLING, Catholic Univ. of America, Washington, D. C. 1896.

Prof. JAMES HENRY BREASTED, University of Chicago, Chicago, Ill. 1891.

Prof. CHAS. A. BRIGGS (Union Theological Seminary), 700 Park Ave., New York, N. Y. 1879.

Prof. C. A. BRODIE BROCKWELL, McGill University, Montreal, Canada. 1906.

Dr. PAUL BRÖNNLE, 73 Burdett Ave., Westcliff-on-Sea, England. 1903.

Prof. FRANCIS BROWN (Union Theological Seminary), 700 Park Ave., New York, N. Y. 1881.

Prof. CARL DARLING BUCK, University of Chicago, Chicago, Ill. 1892.

Rev. JOHN CAMPBELL, Kingsbridge, New York, N. Y. 1896.

Rev. SIMEON J. CARR, 1527 Church St., Frankford, Philadelphia, Pa. 1892.

Pres. FRANKLIN CARTER, care Hon. F. J. Kingsbury, Waterbury, Conn. 1873.

Dr. PAUL CARUS, La Salle, Illinois. 1897.

Dr. I. M. CASANOWICZ, U. S. National Museum, Washington, D. C. 1893.

Miss EVA CHANNING, Hemenway Chambers, Boston, Mass. 1883.

Prof. ALBERT T. CLAY (Univ. of Penna.), 415 South 44th St., Philadelphia, Pa. 1907.

Rev. HENRY N. COBB, 25 East 22d St., New York, N. Y. 1875.

† GEORGE WETMORE COLLES, 62 Fort Greene Place, Brooklyn, N. Y. 1882.

Prof. HERMANN COLLITZ, Johns Hopkins University, Baltimore, Md. 1887.

Miss ELIZABETH S. COLTON, Easthampton, Mass. 1896.

C. EVERETT CONANT, Translator-Interpreter Executive Bureau, Manila, P. I. 1905.

WILLIAM MERRIAM CRANE, 16 East 37th St., New York, N. Y. 1902.

STEWART CULIN, Brooklyn Institute Museum, Eastern Parkway, Brooklyn, N. Y. 1888.

Rev. CHARLES W. CURRIER, 941 F St., Washington, D. C. 1904.

Prof. JOHN D. DAVIS, Princeton Theological Seminary, Princeton, N. J. 1888.

LEE MALTBIE DEAN, Westbrook, Maine. 1897.

Prof. ALFRED L. P. DENNIS, Madison, Wis. 1900.

JAMES T. DENNIS, University Club, Baltimore, Md. 1900.

Rev. WILLIAM L. DE VRIES, 301 A St. S. E., Washington, D. C. 1906.

Rev. D. STUART DODGE, 99 John St., New York, N. Y. 1867.

DAVID J. DOHERTY, M.D., 456 Lasalle Ave., Chicago, Ill. 1905.

Dr. HARRY WESTBROOK DUNNING, 5 Kilsyth Road, Brookline, Mass. 1894.

Prof. M. W. EASTON, 224 South 43d St., Philadelphia, Pa. 1872.

Prof. FREDERICK C. EISELEN, Garrett Biblical Inst., Evanston, Ill. 1901.

Mrs. WILLIAM M. ELLICOTT, 106 Ridgewood Road, Roland Park, Md. 1897.

Prof. LEVI H. ELWELL, Amherst College, Amherst, Mass. 1883.

Rev. ARTHUR H. EWING, The Jumna Mission House, Allahâbâd, N. W. P., India. 1900.

Rev. Prof. C. P. FAGNANI, 772 Park Ave., New York, N. Y. 1901.

Prof. EDWIN WHITFIELD FAY (University of Texas), 200 West 24th St., Austin, Texas. 1888.

ERNEST F. FENOLLOSA, 159 Church St., Mobile, Ala. 1894.

Prof. HENRY FERGUSON, St. Paul's School, Concord, N. H. 1876.

Dr. JOHN C. FERGUSON, 110 Bubbling Well Road, Shanghai, China. 1900.

Prof. RALPH HALL FERRIS (Theological Seminary), 45 Warren Ave., Chicago, Ill. 1905.

CLARENCE STANLAY FISHER, 4152 Parkside Ave., Philadelphia, Pa. 1905.

†Lady CAROLINE DE FILIPPI FITZ GERALD, 167 Via Urbana, Rome, Italy. 1886.

Rev. WALLACE B. FLEMING, Maplewood, N. J. 1906.

Rev. THEODORE C. FOOTE, Johns Hopkins University, Baltimore, Md. 1900.

†FRANK B. FORBES, 65 Marlborough St., Boston, Mass. 1864.

Prof. HUGHELL E. W. FOSBROKE, Nashotah House, Nashotah, Wis. 1907.

MARQUIS ANTOINE FRABASILIS, 1017 East 187th St., New York, N. Y. 1907.

LEO J. FRACHTENBERG, Tuscarora P. O., Middleport, Ont. 1907.

Rev. JAS. EVERETT FRAME (Union Theological Sem.), 700 Park Ave., New York, N. Y. 1892.

Prof. ISRAEL FRIEDLAENDER (Jewish Theological Seminary), 1549 St. Nicholas Ave., New York, N. Y. 1904.

Dr. WILLIAM H. FURNESS, 3d, 1906 Sansom St., Philadelphia, Pa. 1897.

Prof. J. B. GAME, State Normal School, Cape Girardeau, Mo. 1907.

Dr. FLETCHER GARDNER, 202 East Kirkwood Ave., Bloomington, Ind. 1905.

ROBERT GARRETT, Continental Building, Baltimore, Md. 1903.

Prof. BASIL LANNEAU GILDERSLEEVE, Johns Hopkins Univ., Baltimore, Md. 1858.

Dr. DANIEL COIT GILMAN, 614 Park Ave., Baltimore, Md. 1857.

Prof. WILLIAM WATSON GOODWIN (Harvard Univ.), 5 Follen St., Cambridge, Mass. 1857.

Prof. RICHARD J. H. GOTTHEIL, Columbia University, New York, N. Y. 1886.

Miss FLORENCE A. GRAGG, 26 Maple Ave., Cambridge, Mass. 1906.

Prof. ELIHU GRANT (Smith College), Northampton, Mass. 1907.

LOUIS H. GRAY, 354 Summer Ave., Newark, N. J. 1897.

Mrs. LOUIS H. GRAY, 354 Summer Ave., Newark, N. J. 1907.

Miss LOUISE H. R. GRIEVE, M.D., Satara, Bombay Presidency, India. 1898.

Miss LUCIA C. GRAEME GRIEVE, 462 West 151st St., New York, N. Y. 1894.

Prof. LOUIS GROSSMANN (Hebrew Union College), 2212 Park Ave., Cincinnati, O. 1890.

Rev. Dr. W. M. GROTON, Dean of the Protestant Episcopal Divinity School, 5000 Woodlawn Ave., Philadelphia, Pa. 1907.

CHAS. F. GUNTHER, 212 State St., Chicago, Ill. 1889.

GEORGE C. O. HAAS, 64 East Seventh St., New York, N. Y. 1903.

Dr. CARL C. HANSEN, Lakawn Lampang, Laos, Siam (via Brindisi, Moulmain, and Raheng). 1902.

PAUL V. HARPER, 59th St. and Lexington Ave., Chicago, Ill. 1906.

Prof. ROBERT FRANCIS HARPER, Univ. of Chicago, Chicago, Ill. 1886.

Prof. SAMUEL HART, D.D., Berkeley Divinity School, Middletown, Conn. 1879.

Prof. PAUL HAUPT (Johns Hopkins Univ.), 2511 Madison Ave., Baltimore. 1883.

Dr. HENRY HARRISON HAYNES, 6 Ellery St., Cambridge, Mass. 1892.

EDWARD A. HENRY, 70 Middle Divinity, University of Chicago, Ill. 1906.

Col. THOS. WENTWORTH HIGGINSON, 25 Buckingham St., Cambridge, Mass. 1869.

Prof. HERMANN V. HILPRECHT (Univ. of Pennsylvania), 403 South 41st St., Philadelphia, Pa. 1887.

Rev. Dr. WILLIAM J. HINKE, 28 Court St., Auburn, N. Y. 1907.

Prof. FRIEDRICH HIRTH (Columbia Univ.), 501 West 113th St., New York, N. Y. 1903.

Prof. CHARLES T. HOCK (Theological Seminary), 220 Liberty St., Bloomfield, N. J. 1903.

†Dr. A. F. RUDOLF HOERNLE, 8 Northmoor Road, Oxford, England. 1893.

Rev. HUGO W. HOFFMAN, 306 Rodney St., Brooklyn, N. Y. 1899.

Prof. FRANKLIN W. HOOPER, 502 Fulton St., Brooklyn, N. Y. 1906.

†Prof. E. WASHBURN HOPKINS (Yale Univ.), 299 Lawrence St., New Haven, Conn. 1881.

CHAS. E. HORNE, 5836 Drexel Ave., Chicago, Ill. 1906.

Rev. Dr. THOMAS P. HUGHES, Kings Park, Long Island, N. Y. 1905.

Rev. ROBERT E. HUME, Ahmednagar, India. 1900.

Miss ANNIE K. HUMPHEREY, 1114 14th St., Washington, D. C. 1873.

Miss MARY INDA HUSSEY, Ocean Grove, N. Y. 1901.

HENRY MINOR HUXLEY, 31 William St., Worcester, Mass. 1902.

Prof. HENRY HYVERNAT (Catholic Univ. of America), 3405 Twelfth St., N. E. (Brookland), Washington, D. C. 1889.

Prof. A. V. WILLIAMS JACKSON (Columbia Univ.), 10 Highland Place, Yonkers, N. Y. 1885.

JOHN DAY JACKSON, 86 Crown St., New Haven, Conn. 1905.

Prof. MORRIS JASTROW, JR. (Univ. of Pennsylvania), 248 South 23d St., Philadelphia, Pa. 1886.

Prof. JAMES RICHARD JEWETT, 5757 Lexington Ave., Chicago, Ill. 1887.

Prof. CHRISTOPHER JOHNSTON (Johns Hopkins University), 21 West 20th St., Baltimore, Md. 1889.

Prof. MAX KELLNER, Episcopal Theological School, Cambridge, Mass. 1886.

Miss ELIZA H. KENDRICK, 45 Hunnewell Ave., Newton, Mass. 1896.

Prof. CHARLES FOSTER KENT (Yale Univ.), 406 Humphrey St., New Haven, Conn. 1890.

Prof. GEORGE L. KITTREDGE (Harvard University), 9 Hilliard St., Cambridge, Mass. 1899.

NICHOLAS A. KOENIG, 80 West 12th St., New York, N. Y. 1906.

Rev. GEORGE A. KOHUT, 781 West End Ave., New York, N. Y. 1894.

Miss LUCILE KOHN, 1138 Madison Ave., New York, N. Y. 1907.

†Prof. CHARLES ROCKWELL LANMAN (Harvard Univ.), 9 Farrar St., Cambridge, Mass. 1876.

ROBERT JULIUS LAU, 650 Leonard St., Brooklyn, N. Y. 1906.

BERTHOLD LAUFER, Field Museum of Natural History, Chicago, Ill. 1900.

†HENRY C. LEA, 2000 Walnut St., Philadelphia, Pa. 1898.

C. S. LEAVENWORTH, care of Brown, Shipley & Co., 123 Pall Mall, London, England. 1900.

Miss E. J. LETSON, Society of Natural Science, Library Building, Buffalo, N. Y. 1907.

Prof. CHARLES E. LITTLE (Vanderbilt Univ.), 308 Gowday St., Nashville, Tenn. 1901.

Prof. ENNO LITTMAN, Schweighäuser Str. 24[II], Strassburg, i/Els., Germany. 1902.

PERCIVAL LOWELL, care of Putnam & Putnam, 50 State St., Boston, Mass. 1893.

†BENJAMIN SMITH LYMAN, 708 Locust St., Philadelphia, Pa. 1871.

Prof. DAVID GORDON LYON, Harvard Univ. Semitic Museum, Cambridge, Mass. 1882.

ALBERT MORTON LYTHGOE, Metropolitan Museum of Art, New York, N. Y. 1899.

Mrs. MATILDA R. MCCONNELL, 112 Madison Ave., New York, N. Y. 1890.

Prof. DUNCAN B. MACDONALD, Hartford Theological Seminary, Hartford, Conn. 1893.

Rev. CHARLES S. MACFARLAND, 37 Bayview Ave., South Norwalk, Conn. 1898.

WILLIAM E. W. MACKINLAY, 1st Lieut. 11th U. S. Cavalry, Fort Ethan Allen, Vt. 1904.

Dr. ALBERT A. MADSEN, Durham, Conn. 1906.

Prof. HERBERT W. MAGOUN, 70 Kirkland St., Cambridge, Mass.

Prof. MAX L. MARGOLIS, Hebrew Union College, Cincinnati, Ohio. 1890.

Prof. ALLAN MARQUAND, Princeton Univ., Princeton, N. J. 1888.

Prof. WINFRED ROBERT MARTIN, Hispanic Society of America, West 156th St., New York, N. Y. 1889.

ISAAC G. MATTHEWS, McMaster Univ., Toronto, Canada. 1906.

J. RENWICK METHENY, 3412 Sansom St., Philadelphia, Pa. 1907.

MARTIN A. MEYER, 22 St. Francis Place, Brooklyn, N. Y. 1906.

TRUMAN MICHELSON, R.F.D. 48, Ridgefield, Conn. 1899.

Prof. LUCIUS H. MILLER, Princeton University, N. J. 1907.

Mrs. HELEN L. MILLION (*née* LOVELL), Hardin College, Mexico, Mo. 1892.

Prof. LAWRENCE H. MILLS (Oxford University), 119 Iffley Road, Oxford, England. 1881.

Prof. EDWIN KNOX MITCHELL (Hartford Theol. Sem.), 57 Gillette St., Hartford, Conn. 1898.

ROLAND H. MODE, 5836 Drexel Ave., Chicago, Ill. 1906.

Prof. J. A. MONTGOMERY (P. E. Divinity School), 6806 Green St., Germantown, Pa. 1903.

Prof. GEORGE F. MOORE (Harvard University), 3 Divinity Ave., Cambridge, Mass. 1887.

JUSTIN HARTLEY MOORE, 8 West 119th St., New York, N. Y. 1904.

†Mrs. MARY H. MOORE, 3 Divinity Ave., Cambridge, Mass. 1902.

[Miss MARGARETTA MORRIS. See Mrs. S. B. SCOTT.]

Prof. EDWARD S. MORSE, Salem, Mass. 1894.

Rev. HANS K. MOUSSA, Burlington, Wis. 1906.

Rev. Dr. PHILIP S. MOXOM, 83 Dartmouth Terrace, Springfield, Mass. 1898.

Prof. W. MAX MUELLER, 4308 Market St., Philadelphia, Pa. 1905.

Rev. Prof. A. J. ELDER MULLAN, S.J., Georgetown University, Washington, D. C. 1889.

Mrs. ETHEL WATTS MUMFORD, 31 West 81st St., New York, N. Y. 1904.

Dr. WILLIAM MUSS-ARNOLT, Public Library, Boston, Mass. 1906.

Rev. JAS. B. NIES, Hotel Margaret, Columbia Heights, Brooklyn, N. Y. 1906.

Prof. CHARLES ELIOT NORTON, Cambridge, Mass. 1857.

Rt. Rev. Mgr. DENNIS T. O'CONNELL, D.D. (Catholic University), Washington, D. C. 1903.

Prof. HANNS OERTEL (Yale Univ.), 2 Phelps Hall, New Haven, Conn. 1890.

CHAS. J. OGDEN, 250 West 88th St., New York, N. Y. 1906.

Miss ELLEN S. OGDEN, St. Agnes School, Albany, N. Y. 1898.

SAMUEL G. OLIPHANT, Johns Hopkins Univ., Baltimore, Md. 1906.

Prof. PAUL OLTRAMARE (University of Geneva), Ave. de Bosquets, Servette, Genève, Switzerland. 1904.

†ROBERT M. OLYPHANT, 160 Madison Ave., New York, N. Y. 1861.

JOHN ORNE, 104 Ellery St., Cambridge, Mass. 1890.

Rev. Dr. CHARLES RAY PALMER, 562 Whitney Ave., New Haven, Conn. 1900.

Prof. LEWIS B. PATON, Hartford Theological Seminary, Hartford, Conn. 1894.

Prof. WALTER M. PATTON, Baker Univ., Baldwin, Kansas. 1903.

Dr. CHARLES PEABODY, 197 Brattle St., Cambridge, Mass. 1892.

Prof. ISMAR J. PERITZ, Syracuse University, Syracuse, N. Y. 1894.

Prof. EDWARD DELAVAN PERRY (Columbia Univ.), 542 West 114th St., New York, N. Y. 1879.

Rev. Dr. JOHN P. PETERS, 225 West 99th St., New York, N. Y. 1882.

Prof. DAVID PHILIPSON (Hebrew Union College), 3947 Beechwood Ave., Rose Hill, Cincinnati, O. 1889.

WILLIAM POPPER, University of California, Berkeley, Cal. 1897.

Prof. IRA M. PRICE, University of Chicago, Chicago, Ill. 1887.

Prof. JOHN DYNELEY PRINCE (Columbia Univ.), Sterlington, Rockland Co., N. Y. 1888.

GEORGE PAYN QUACKENBOS, 331 West 28th St., New York, N. Y. 1904.
Prof. F. P. RAMSAY (S. W. Presbyterian University), Clarksville, Tenn. 1889.
Dr. GEORGE ANDREW REISNER, The Pyramids, Cairo, Egypt. 1891.
ERNEST C. RICHARDSON, Library of Princeton Univ., Princeton, N. J. 1900.
J. NELSON ROBERTSON, 294 Avenue Road, Toronto, Ont. 1902.
BENJ. W. ROBINSON, 700 Park Ave., New York, N. Y. 1906.
EDWARD ROBINSON, Metropolitan Museum of Art, New York, N. Y. 1894.
Rev. Dr. GEORGE LIVINGSTON ROBINSON (McCormick Theol. Sem.), 10 Chalmers Place, Chicago, Ill. 1892.
Hon. WILLIAM WOODVILLE ROCKHILL, Peking, China. 1880.
Prof. JAMES HARDY ROPES (Harvard University), 13 Follen St., Cambridge, Mass. 1893.
WILLIAM ROSENAU, Johns Hopkins Univ., Baltimore, Md. 1897.
Miss ADELAIDE RUDOLPH, 18 Wilbur St., Cleveland, O. 1894.
Mrs. JANET E. RUUTZ-REES, Rosemary Cottage, Greenwich, Conn. 1897.
Miss CATHARINE B. RUNKLE, 15 Everett St., Cambridge, Mass. 1900.
ARTHUR W. RYDER (University of California), 2337 Telegraph Ave., Berkeley, Cal. 1902.
Mrs. EDW. E. SALISBURY, 237 Church St., New Haven, Conn. 1906.
Rev. Dr. FRANK K. SANDERS, 22 Rockview St., Jamaica Plain, Mass. 1897.
JOHANN F. SCHELTEMA, care of Messrs. Kerkhoven & Co., 115 Heerengracht, Amsterdam, Holland. 1906.
Dr. H. ERNEST SCHMID, White Plains, N. Y. 1866.
Prof. NATHANIEL SCHMIDT, Cornell University, Ithaca, N. Y. 1894.
MONTGOMERY SCHUYLER, Jr., First Secretary of the American Embassy, St. Petersburg, Russia. 1899.
GILBERT CAMPBELL SCOGGIN, 67 Kirkland St., Cambridge, Mass. 1906.
†Mrs. SAMUEL BRYAN SCOTT, (*née* Morris), 124 Highland Ave., Chestnut Hill, Philadelphia, Pa. 1903.
Rev. WILLIAM G. SEIPLE, 78 Higashi Sambancho, Sendai, Japan. 1902.
J. HERBERT SENTER, 10 Avon St., Portland, Me. 1870.
Prof. CHARLES N. SHEPARD (General Theological Seminary), 9 Chelsea Square, New York, N. Y. 1907.
CHARLES C. SHERMAN, 65 Irving Place, New York, N. Y. 1904.
†The Very Rev. JOHN R. SLATTERY, 261 Central Park West, New York, N. Y. 1903.
Captain C. C. SMITH, Presidio of San Francisco, Cal. 1907.
Prof. HENRY PRESERVED SMITH, Theological School, Meadville, Pa. 1877.
JOHN M. P. SMITH, University of Chicago, Ill. 1906.
EDWARD H. SPIEKER, Johns Hopkins Univ., Baltimore, Md. 1884.
Prof. HANS H. SPOER, Ph.D., Jerusalem, Syria. 1899.
Prof. CHARLES C. STEARNS, Pomona College, Claremont, Cal. 1899.
Rev. JAMES D. STEELE, 15 Grove Terrace, Passaic, N. J. 1892.
Mrs. SARA YORKE STEVENSON, 237 South 21st St., Philadelphia, Pa. 1907.

Rev. ANSON PHELPS STOKES, JR., Yale University, New Haven, Conn. 1900.

MAYER SULZBERGER, 1303 Girard Ave., Philadelphia, Pa. 1888.

Prof. GEORGE SVERDRUP, Jr., Augsburg Seminary, Minneapolis, Minn. 1907.

HENRY OSBORN TAYLOR, Century Association, 7 West 43d St., New York, N. Y. 1899.

Prof. WILLIAM C. THAYER, Lehigh University, Bethlehem, Pa. 1907.

EBEN FRANCIS THOMPSON, 311 Main St., Worcester, Mass. 1906.

Rev. Dr. J. J. TIERNEY, Mount St. Mary's College, Emmitsburg, Md. 1901.

Prof. HENRY A. TODD (Columbia University), 824 West End Ave., New York, N. Y. 1885.

OLAF A. TOFFTEEN, 1113 Washington Blvd., Chicago, Ill. 1906.

†Prof. CHARLES C. TORREY (Yale University), 67 Mansfield St., New Haven, Conn. 1891.

Prof. CRAWFORD H. TOY (Harvard University), 7 Lowell St., Cambridge, Mass. 1871.

Rev. JOSEPH VINCENT TRACY, 20 Holton St., Allston, Boston, Mass. 1892.

ADDISON VAN NAME (Yale Univ.), 121 High St., New Haven, Conn. 1863.

Miss SUSAN HAYES WARD, The Stone House, Abington Ave., Newark, N. J. 1874.

Rev. Dr. WILLIAM HAYES WARD, 130 Fulton St., New York, N. Y. 1869.

Miss CORNELIA WARREN, Cedar Hill, Waltham, Mass. 1894.

Prof. WILLIAM F. WARREN (Boston Univ.), 131 Davis Ave., Brookline, Mass. 1877.

Rev. W. SCOTT WATSON, West New York, New Jersey. 1893.

Prof. J. E. WERREN, 17 Leonard Ave., Cambridge, Mass. 1894.

Prof. JENS IVERSON WESTENGARD (Harvard Univ.), Asst. Gen. Adviser to H.S.M. Govt., Bangkok, Siam. 1903.

Pres. BENJAMIN IDE WHEELER, University of California, Berkeley, Cal. 1885.

Prof. JOHN WILLIAMS WHITE (Harvard Univ.), 18 Concord Ave., Cambridge, Mass. 1877.

Miss MARIA WHITNEY, 2 Divinity Ave., Cambridge, Mass. 1897.

Mrs. WILLIAM DWIGHT WHITNEY, 227 Church St., New Haven, Conn. 1897.

Rev. E. T. WILLIAMS, U. S. Legation, Peking, China. 1901.

Prof. FREDERICK WELLS WILLIAMS (Yale Univ.), 135 Whitney Ave., New Haven, Conn. 1895.

TALCOTT WILLIAMS ("The Press"), 916 Pine St., Philadelphia, Pa. 1884.

Rev. Dr. WILLIAM COPLEY WINSLOW, 525 Beacon St., Boston, Mass. 1885.

Rev. STEPHEN S. WISE, 46 East 68th St., New York, N. Y. 1894.

HENRY B. WITTON, Inspector of Canals, 16 Murray St., Hamilton, Ontario. 1885.

LOUIS B. WOLFENSON, 513 Laurens St., Baltimore, Md. 1904.
WILLIAM W. WOOD, 2210 North Fulton Ave., Baltimore, Md. 1900.
JAMES H. WOODS (Harvard Univ.), 2 Chestnut St., Boston, Mass. 1900.
Prof. JOHN HENRY WRIGHT (Harvard Univ.), 38 Quincy St., Cambridge, Mass. 1898.
Rev. JAMES OWENS WRIGHTSON, 1031 Monument St., Baltimore, Md. 1903.
Rev. ABRAHAM YOHANNAN, Columbia University, New York, N. Y. 1894.

[Total, 269.]

III. MEMBERS OF THE SECTION FOR THE HISTORICAL STUDY OF RELIGIONS.

Rev. Dr. SAMUEL H. BISHOP, 500 West 122d St., New York, N. Y. 1898.
Rev. JOHN L. CHANDLER, Auburndale, Mass. 1899.
SAMUEL DICKSON, 901 Clinton St., Philadelphia, Pa. 1899.
Prof. PATTERSON DU BOIS, 401 South 40th St., Philadelphia, Pa. 1907.
Prof. ARTHUR L. GILLETT, Hartford Theological Seminary, Hartford, Conn. 1898.
CHARLES B. GULICK (Harvard University), 18 Walker St., Cambridge, Mass. 1899.
Prof. GEORGE T. LADD (Yale Univ.), 204 Prospect St., New Haven, Conn. 1898.
M. A. LANE, 451 Jackson Blvd., Chicago, Ill. 1907.
FRED NORRIS ROBINSON, Ph.D. (Harvard Univ.), Longfellow Park, Cambridge, Mass. 1900.
Rev. Dr. MINOT J. SAVAGE, 34th St. and Park Ave., New York, N. Y. 1898.
Rev. W. A. SHEDD, Am. Mission, Urumia, Persia (via Berlin and Tabriz). 1906.
Prof. EDWIN R. SELIGMAN (Columbia Univ.), 324 West 86th St., New York, N. Y. 1898.
Pres. LANGDON C. STEWARDSON, Hobart College, Geneva, N. Y. 1901.
Prof. WILLIAM G. SUMNER (Yale Univ.), 240 Edwards St., New Haven, Conn. 1898.
Prof. CHARLES MELLEN TYLER, Cornell University, Ithaca, N. Y. 1904.
Prof. R. M. WENLEY, University of Michigan, Ann Arbor, Mich. 1898.
Rev. G. E. WHITE, Anatolia College, Marsovan, Turkey [papers to German Consulate (White), Samsoun, Turkey.] 1906.
Prof. IRVING F. WOOD, Smith College, Northampton, Mass. 1905.

[Total, 18.]

Number of Members of all Classes, 312.

SOCIETIES, LIBRARIES, TO WHICH THE PUBLICATIONS OF THE AMERICAN ORIENTAL SOCIETY ARE SENT BY WAY OF GIFT OR EXCHANGE.

I. AMERICA.

BOSTON, MASS.: American Academy of Arts and Sciences.
CHICAGO, ILL.: Field Museum of Natural History.

NEW YORK: American Geographical Society.
PHILADELPHIA, PA.: American Philosophical Society.
Free Museum of Science and Art, Univ. of Penna.
WASHINGTON, D. C.: Smithsonian Institution.
Bureau of American Ethnology.
WORCESTER, MASS.: American Antiquarian Society.

II. EUROPE.

AUSTRIA, VIENNA: Kaiserliche Akademie der Wissenschaften.
Anthropologische Gesellschaft.
PRAGUE: Königlich Böhmische Gesellschaft der Wissenschaften.
DENMARK, ICELAND, REYKJAVIK: University Library.
FRANCE, PARIS: Société Asiatique. (Rue de Seine, Palais de l'Institut.)
Bibliothèque Nationale.
Musée Guimet. (Avenue du Trocadéro.)
Académie des Inscriptions et Belles-Lettres.
École des Langues Orientales Vivantes. (Rue de Lille, 2.)
GERMANY, BERLIN: Königlich Preussische Akademie der Wissenschaften.
Königliche Bibliothek.
Seminar für Orientalische Sprachen. (Am Zeughause 1.)
GÖTTINGEN: Königliche Gesellschaft der Wissenschaften.
HALLE: Bibliothek der Deutschen Morgenländischen Gesellschaft. (Friedrichstr. 50.)
LEIPZIG: Königlich Sächsische Gesellschaft der Wissenschaften.
Leipziger Semitistische Studien. (J. C. Hinrichs.)
MUNICH: Königlich Bairische Akademie der Wissenschaften.
Königliche Hof- und Staatsbibliothek.
TÜBINGEN: Library of the University.
GREAT BRITAIN, LONDON: Royal Asiatic Society of Great Britain and Ireland. (22 Albemarle St., W.)
Library of the India Office. (Whitehall, SW.)
Society of Biblical Archæology. (37 Great Russell St., Bloomsbury, W.C.)
Philological Society. (Care of Dr. F. J. Furnival, 3 St. George's Square, Primrose Hill, NW.)
ITALY, FLORENCE: Società Asiatica Italiana.
ROME: Reale Accademia dei Lincei.
NETHERLANDS, AMSTERDAM: Koninklijke Akademie van Wetenschappen.
THE HAGUE: Koninklijk Instituut voor Taal-, Land-, en Volkenkunde van Nederlandsch Indië.
LEYDEN: Curatorium of the University.
RUSSIA, HELSINGFORS: Société Finno-Ougrienne.
ST. PETERSBURG: Imperatorskaja Akademija Nauk.
Archeologiji Institut.
SWEDEN, UPSALA: Humanistiska Vetenskaps-Samfundet.

III. ASIA.

CALCUTTA, GOV'T OF INDIA: Home Department.
CEYLON, COLOMBO: Ceylon Branch of the Royal Asiatic Society.
CHINA, SHANGHAI: China Branch of the Royal Asiatic Society.
TONKIN: l'École Française d'extrême Orient (Rue de Coton), Hanoi.
INDIA, BOMBAY: Bombay Branch of the Royal Asiatic Society.
The Anthropological Society. (Town Hall.)
CALCUTTA: The Asiatic Society of Bengal. (57 Park St.)
The Buddhist Text Society. (86 Jaun Bazar St.)
LAHORE: Library of the Oriental College.
SIMLA: Office of the Director General of Archaeology. (Benmore, Simla, Punjab.)
JAPAN, TOKYO: The Asiatic Society of Japan.
JAVA, BATAVIA: Bataviaasch Genootschap van Kunsten en Wetenschappen.
KOREA: Branch of Royal Asiatic Society, Seoul, Korea.
NEW ZEALAND: The Polynesian Society, New Plymouth.
PHILIPPINE ISLANDS: The Ethnological Survey, Manila.
SYRIA: The American School (care U. S. Consul, Jerusalem).
Revue Biblique, care of M. J. Lagrange, Jerusalem.
Al-Machriq, Université St. Joseph, Beirut, Syria.

IV. AFRICA.

EGYPT, CAIRO: The Khedivial Library.

V. EDITORS OF THE FOLLOWING PERIODICALS.

The Indian Antiquary (Education Society's Press, Bombay, India).
Wiener Zeitschrift für die Kunde des Morgenlandes (care of Alfred Hölder, Rothenthurm-str. 15, Vienna, Austria).
Zeitschrift für vergleichende Sprachforschung (care of Prof. E. Kuhn, 3 Hess Str., Munich, Bavaria).
Revue de l'Historie des Religions (care of M. Jean Réville, chez M. E. Leroux, 28 rue Bonaparte, Paris, France).
Zeitschrift für die alttestamentliche Wissenschaft (care of Prof. D. Karl Marti, Marienstr. 25, Bern, Switzerland).
Beiträge zur Assyriologie und semitischen Sprachwissenschaft. (J. C. Hinrichs'sche Buchhandlung, Leipzig, Germany.)
Oriental Bibliography (care of Prof. Lucian Scherman, 18 Ungerer Str., Munich, Bavaria).
The American Antiquarian and Oriental Journal, 438 East 57th St., Chicago, Ill.
American Journal of Archaeology, 65 Sparks St., Cambridge, Mass.
Transactions of the American Philological Association (care of Prof. F. G. Moore, Hanover, N. H.).
Le Monde Oriental (care of Prof. K. F. Johansson, Upsala, Sweden).

RECIPIENTS: 312 (Members) + 70 (Gifts and Exchanges) = 382.

REQUEST.

The Editors request the Librarians of any Institution or Libraries, not mentioned above, to which this Journal may regularly come, to notify them of the fact. It is the intention of the Editors to print a list, as complete as may be, of regular subscribers for the Journal or of recipients thereof. The following is the beginning of such a list.

Andover Theological Seminary.
Boston Public Library.
Brown University Library.
Chicago University Library.
Columbia University Library.
Cornell University Library.
Harvard Sanskrit Class-Room Library.
Harvard Semitic Class-Room Library.
Harvard University Library.
Nebraska University Library.
New York Public Library.
Yale University Library.

CONSTITUTION AND BY-LAWS

OF THE

AMERICAN ORIENTAL SOCIETY.

With Amendments of April, 1897.

CONSTITUTION.

ARTICLE I. This Society shall be called the AMERICAN ORIENTAL SOCIETY.

ARTICLE II. The objects contemplated by this Society shall be:—

1. The cultivation of learning in the Asiatic, African, and Polynesian languages, as well as the encouragement of researches of any sort by which the knowledge of the East may be promoted.

2. The cultivation of a taste for oriental studies in this country.

3. The publication of memoirs, translations, vocabularies, and other communications, presented to the Society, which may be valuable with reference to the before-mentioned objects.

4. The collection of a library and cabinet.

ARTICLE III. The members of this Society shall be distinguished as corporate and honorary.

ARTICLE IV. All candidates for membership must be proposed by the Directors, at some stated meeting of the Society, and no person shall be elected a member of either class without receiving the votes of as many as three-fourths of all the members present at the meeting.

ARTICLE V. The government of the Society shall consist of a President, three Vice Presidents, a Corresponding Secretary, a Recording Secretary, a Secretary of the Section for the Historical Study of Religions, a Treasurer, a Librarian, and seven Directors, who shall be annually elected by ballot, at the annual meeting.

ARTICLE VI. The President and Vice Presidents shall perform the customary duties of such officers, and shall be *ex-officio* members of the Board of Directors.

ARTICLE VII. The Secretaries, Treasurer, and Librarian shall be *ex-officio* members of the Board of Directors, and shall perform their respective duties under the superintendence of said Board.

ARTICLE VIII. It shall be the duty of the Board of Directors to regulate the financial concerns of the Society, to superintend its publications, to carry into effect the resolutions and orders of the Society, and to exercise a general supervision over its affairs. Five Directors at any regular meeting shall be a quorum for doing business.

ARTICLE IX. An Annual meeting of the Society shall be held during Easter week, the days and place of the meeting to be determined by the Directors, said meeting to be held in Massachusetts at least once in three

years. One or more other meetings, at the discretion of the Directors, may also be held each year at such place and time as the Directors shall determine.

ARTICLE X. There shall be a special Section of the Society, devoted to the historical study of religions, to which section others than members of the American Oriental Society may be elected in the same manner as is prescribed in Article IV.

ARTICLE XI. This Constitution may be amended, on a recommendation of the Directors, by a vote of three-fourths of the members present at an annual meeting.

BY-LAWS.

I. The Corresponding Secretary shall conduct the correspondence of the Society, and it shall be his duty to keep, in a book provided for the purpose, a copy of his letters; and he shall notify the meetings in such manner as the President or the Board of Directors shall direct.

II. The Recording Secretary shall keep a record of the proceedings of the Society in a book provided for the purpose.

III. *a.* The Treasurer shall have charge of the funds of the Society; and his investments, deposits, and payments shall be made under the superintendence of the Board of Directors. At each annual meeting he shall report the state of the finances, with a brief summary of the receipts and payments of the previous year.

III. *b.* After December 31, 1896, the fiscal year of the Society shall correspond with the calendar year.

III. *c.* At each annual business meeting in Easter week, the President shall appoint an auditing committee of two men—preferably men residing in or near the town where the Treasurer lives—to examine the Treasurer's accounts and vouchers, and to inspect the evidences of the Society's property, and to see that the funds called for by his balances are in his hands. The Committee shall perform this duty as soon as possible after the New Year's day succeeding their appointment, and shall report their findings to the Society at the next annual business meeting thereafter. If these findings are satisfactory, the Treasurer shall receive his acquittance by a certificate to that effect, which shall be recorded in the Treasurer's book, and published in the Proceedings.

IV. The Librarian shall keep a catalogue of all books belonging to the Society, with the names of the donors, if they are presented, and shall at each annual meeting make a report of the accessions to the library during the previous year, and shall be farther guided in the discharge of his duties by such rules as the Directors shall prescribe.

V. All papers read before the Society, and all manuscripts deposited by authors for publication, or for other purposes, shall be at the disposal of the Board of Directors, unless notice to the contrary is given to the Editors at the time of presentation.

VI. Each corporate member shall pay into the treasury of the Society an annual assessment of five dollars; but a donation at any one time of seventy-five dollars shall exempt from obligation to make this payment.

VII. Corporate and Honorary members shall be entitled to a copy of all the publications of the Society issued during their membership, and shall also have the privilege of taking a copy of those previously published, so far as the Society can supply them, at half the ordinary selling price.

VIII. Candidates for membership who have been elected by the Society shall qualify as members by payment of the first annual assessment within one month from the time when notice of such election is mailed to them. A failure so to qualify shall be construed as a refusal to become a member. If any corporate member shall for two years fail to pay his assessments, his name may, at the discretion of the Directors, be dropped from the list of members of the Society.

IX. Members of the Section for the Historical Study of Religions shall pay into the treasury of the Society an annual assessment of two dollars; and they shall be entitled to a copy of all printed papers which fall within the scope of the Section.

X. Six members shall form a quorum for doing business, and three to adjourn.

SUPPLEMENTARY BY-LAWS.

I. For the Library.

1. The Library shall be accessible for consultation to all members of the Society, at such times as the Library of Yale College, with which it is deposited, shall be open for a similar purpose; further, to such persons as shall receive the permission of the Librarian, or of the Librarian or Assistant Librarian of Yale College.

2. Any member shall be allowed to draw books from the Library upon the following conditions: he shall give his receipt for them to the Librarian, pledging himself to make good any detriment the Library may suffer from their loss or injury, the amount of said detriment to be determined by the Librarian, with the assistance of the President, or of a Vice President; and he shall return them within a time not exceeding three months from that of their reception, unless by special agreement with the Librarian this term shall be extended.

3. Persons not members may also, on special grounds, and at the discretion of the Librarian, be allowed to take and use the Society's books, upon depositing with the Librarian a sufficient security that they shall be duly returned in good condition, or their loss or damage fully compensated.

PUBLICATIONS OF THE AMERICAN ORIENTAL SOCIETY.

PRICE OF THE JOURNAL.

Vol. I. (1843–1849) No. 1 (Nos. 2–4 out of print)	$ .50
Vol. II. (1851)	2.50
Vol. III. (1852–1853)	2.50
Vol. IV. (1853–1854)	2.50
Vol. V. (1855–1856)	2.50
Vol. VI. (1860)	5.00
Vol. VII. (1862)	5.00
Vol. VIII. (1866)	5.00
Vol. IX. (1871)	5.00
Vol. X. (1872–1880)	6.00
Vol. XI. (1882–1885)	5.00
Vol. XII. (1881)	4.00
Vol. XIII. (1889)	6.00
Vol. XIV. (1890)	5.00
Vol. XV. (1893)	5.00
Vol. XVI. (1894–1896)	5.00
Vol. XVII. (1896) bound in full buckram	2.50
Vol. XVIII. First and Second Half (1897) buckram, each 2.50	5.00
Vol. XIX. First Half (1898) full cloth	1.50
Vol. XIX. Second Half (1898) bound in full buckram	2.50
Vol. XX. First and Second Half (1899) buckram, each 2.50	5.00
Vol. XXI. First Half (Index)	2.50
Vol. XXI. Second Half (1900) bound in full buckram	2.50
Vol. XXII. First and Second Half (1901) buckram, each 2.50	5.00
Vol. XXIII. First and Second Half (1902) buckram, each 2.50	5.00
Vol. XXIV. First and Second Half (1903) buckram, each 2.50	5.00
Vol. XXV. First and Second Half (1904) buckram, each 2.50	5.00
Vol. XXVI. First and Second Half (1905) buckram, each 2.50	5.00
Vol. XXVII. First and Second Half (1906) buckram, each 2.50	5.00
Vol. XXVIII. First and Second Half (1907) buckram, each 2.50	5.00
Total	$123.00

Whitney's Tāittirīya-Prātiçākhya (vol. ix.)	$5.00
Avery's Sanskrit Verb-Inflection (from vol. x.)	.75
Whitney's Index Verborum to the Atharva-Veda (vol. xii.)	4.00
The same (vol. xii.) on large paper	5.00
Hopkins's Position of the Ruling Caste (from vol. xiii.)	3.00
Oertel's Jāiminīya-Upaniṣad-Brāhmaṇa (from vol. xvi.)	1.75
Arnold's Historical Vedic Grammar (from vol. xviii.)	1.75
Bloomfield's Kāuçika-Sūtra of the Atharva-Veda (vol. xiv.)	5.00
The Whitney Memorial Volume (vol. xix., first half)	1.50

For any of the above, address the Librarian of the Society, Professor Hanns Oertel, New Haven, Connecticut. Members can have the series at half price. To public libraries or those of educational institutions, Vol. I. No. 1 and Vols. II. to V. will be given free, and the rest sold at a discount of twenty per cent.

TO CONTRIBUTORS.

Fifty copies of each article published in this Journal will be forwarded to the author. A larger number will be furnished at cost.

Arabic, Persian, Syriac, (Jacobite and Nestorian), Armenian, Coptic, Ethiopic, Sanskrit, Tamil, Chinese, and Japanese fonts of types are provided for the printing of the Journal, and others will be procured from time to time, as they are needed.

GENERAL NOTICES.

1. Members are requested to give immediate notice of changes of address to the Treasurer, Prof. Frederick Wells Williams, 135 Whitney avenue, New Haven, Conn.

2. It is urgently requested that gifts and exchanges intended for the Library of the Society be addressed as follows: The Library of the American Oriental Society, Yale University, New Haven, Connecticut, U. S. America.

3. For information regarding the sale of the Society's publications, see the next foregoing page.

4. Communications for the Journal should be sent to Prof. E. Washburn Hopkins or Prof. Charles C. Torrey, New Haven.

CONCERNING MEMBERSHIP.

It is not necessary for any one to be a professed Orientalist in order to become a member of the Society. All persons—men or women—who are in sympathy with the objects of the Society and willing to further its work are invited to give it their help. This help may be rendered by the payment of the annual assessments, by gifts to its library, or by scientific contributions to its Journal, or in all of these ways. Persons desiring to become members are requested to apply to the Treasurer, whose address is given above. Members receive the Journal free. The annual assessment is $5. The fee for Life-Membership is $75.

Persons interested in the Historical Study of Religion may become members of the Section of the Society organized for this purpose. The annual assessment is $2; members receive copies of all publications of the Society which fall within the scope of the Section.